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1.6 go-zookeeper 0.0.0-20201211165307-7117e9ea2414

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1.7 github.com/viney-shih/go-lock 1.1.2

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1.8 viney-shih-go-lock 1.1.2

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1.11 cenkalti-backoff-v3 3.2.2

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1.15 zlib 1.3.1

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1.26 hashicorp-go-immutable-radix 1.3.1

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1.28 coreos-go-semver 0.3.1

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1.29 hashicorp-golang-lru 1.0.2

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1.30 sirupsen-logrus 1.9.3

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1.31 pq 1.10.9

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```
//go:build go1.10
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package pq

import (
 "context"
 "database/sql/driver"
)
```

```
// NoticeHandler returns the notice handler on the given connection, if any. A
// runtime panic occurs if c is not a pq connection. This is rarely used
// directly, use ConnectorNoticeHandler and ConnectorWithNoticeHandler instead.
func NoticeHandler(c driver.Conn) func(*Error) {
 return c.(*conn).noticeHandler
}

// SetNoticeHandler sets the given notice handler on the given connection. A
// runtime panic occurs if c is not a pq connection. A nil handler may be used
// to unset it. This is rarely used directly, use ConnectorNoticeHandler and
// ConnectorWithNoticeHandler instead.
//
// Note: Notice handlers are executed synchronously by pq meaning commands
// won't continue to be processed until the handler returns.
func SetNoticeHandler(c driver.Conn, handler func(*Error)) {
 c.(*conn).noticeHandler = handler
}

// NoticeHandlerConnector wraps a regular connector and sets a notice handler
//
 on it.
type NoticeHandlerConnector struct {
 driver.Connector
 noticeHandler func(*Error)
}

// Connect calls the underlying connector's connect method and then sets the
// notice handler.
func (n *NoticeHandlerConnector) Connect(ctx context.Context) (driver.Conn, error) {
 c, err := n.Connector.Connect(ctx)
 if err == nil {
  SetNoticeHandler(c, n.noticeHandler)
 }
 return c, err
}

// ConnectorNoticeHandler returns the currently set notice handler, if any. If
// the given connector is not a result of ConnectorWithNoticeHandler, nil is
// returned.
func ConnectorNoticeHandler(c driver.Connector) func(*Error) {
 if c, ok := c.(*NoticeHandlerConnector); ok {
  return c.noticeHandler
 }
 return nil
}

// ConnectorWithNoticeHandler creates or sets the given handler for the given
```

```
// connector. If the given connector is a result of calling this function
// previously, it is simply set on the given connector and returned. Otherwise,
// this returns a new connector wrapping the given one and
 setting the notice
// handler. A nil notice handler may be used to unset it.
//
// The returned connector is intended to be used with database/sql.OpenDB.
//
// Note: Notice handlers are executed synchronously by pq meaning commands
// won't continue to be processed until the handler returns.
func ConnectorWithNoticeHandler(c driver.Connector, handler func(*Error)) *NoticeHandlerConnector {
 if c, ok := c.(*NoticeHandlerConnector); ok {
  c.noticeHandler = handler
  return c
 }
 return &NoticeHandlerConnector{Connector: c, noticeHandler: handler}
}
```

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```

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```
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Metadata-Version: 1.1
Name: zstd
Version: 1.3.1
Summary: ZSTD Bindings for Python
Home-page: https://github.com/sergey-dryabzhinsky/python-zstd
Author: Sergey Dryabzhinsky
Author-email: sergey.dryabzhinsky@gmail.com
License: BSD
Description: ==========
python-zstd
==========

.. image:: https://travis-ci.org/sergey-dryabzhinsky/python-zstd.svg?branch=master
:target: https://travis-ci.org/sergey-dryabzhinsky/python-zstd

Simple python bindings to Yann Collet ZSTD compression library

Zstd, short for Zstandard, is a new lossless compression algorithm,
which provides both good compression ratio _and_ speed for your standard compression needs.
"Standard" translates into everyday situations which neither look for highest possible ratio
(which LZMA and ZPAQ cover) nor extreme speeds (which LZ4 covers).

It is provided as a BSD-license package, hosted on GitHub_.

.. _GitHub: https://github.com/facebook/zstd

WARNING!!!

If you setup 1.0.0.99.1 version - remove it manualy to able to update.
PIP matching version strings not tuple of numbers.

Result generated by versions prior to 1.0.0.99.1 is not compatible with orignial Zstd
by any means. It generates custom header and can be readed only by zstd python module.

As of 1.0.0.99.1 version it uses standard Zstd output, not modified.

To prevent data loss there is two functions now: ```compress_old``` and ```decompress_old```.
They are works just like in old versions prior to 1.0.0.99.1.

As of 1.1.4 version module build without them by default.

LINKS
-----

* More full-featured and compatible with Zstandard python bindings
by Gregory Szorc: https://pypi.python.org/pypi/zstandard

TODO
----

* Support dictionary training. Current status is ``not supported``.

Build from source

```
>>> git clone https://github.com/sergey-dryabzhinsky/python-zstd
>>> git submodule update --init
>>> apt-get install python-dev python3-dev python-setuptools python3-setuptools
>>> python setup.py build_ext clean
>>> python3 setup.py build_ext clean
```

Note: legacy format support disabled by default.
To build with legacy support - pass ``--legacy`` option to setup.py script:

```
>>> python setup.py build_ext --legacy clean
```

If you want to build with existing distribution of libzstd just add ``--external`` option.
But beware! Legacy formats support is unknown in this case.

```
>>> python setup.py
build_ext --external clean
```

If paths to header file ``zstd.h`` and libraries is uncommon - use common ``build`` params:
--libraries --include-dirs --library-dirs.

>>> python setup.py build_ext --external --include-dirs /opt/zstd/usr/include --libraries zstd --library-dirs /opt/zstd/lib clean

Install from pypi

>>> # for Python 2.6+
>>> pip install zstd
>>> # or for Python 3.2+
>>> pip3 install zstd

Keywords: zstd,zstandard,compression
Platform: UNKNOWN
Classifier: License :: OSI Approved :: BSD License
Classifier: Intended Audience :: Developers
Classifier: Development Status :: 5 - Production/Stable
Classifier: Operating System :: POSIX
Classifier: Programming Language :: C
Classifier: Programming Language :: Python
Classifier: Programming Language :: Python :: 2.6
Classifier: Programming Language :: Python :: 2.7
Classifier:
Programming Language :: Python :: 3.2
Classifier: Programming Language :: Python :: 3.3
Classifier: Programming Language :: Python :: 3.4
Classifier: Programming Language :: Python :: 3.5
Classifier: Programming Language :: Python :: 3.6

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* /zstd-1-3-1-tar-gz/zstd-1.3.1/zstd/lib/legacy/zstd_v04.c
* /zstd-1-3-1-tar-gz/zstd-1.3.1/zstd/lib/legacy/zstd_v02.c
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* /zstd-1-3-1-tar-gz/zstd-1.3.1/zstd/lib/common/zstd_internal.h
* /zstd-1-3-1-tar-gz/zstd-1.3.1/zstd/lib/common/pool.c
* /zstd-1-3-1-tar-gz/zstd-1.3.1/zstd/lib/legacy/zstd_v06.h
* /zstd-1-3-1-tar-gz/zstd-1.3.1/zstd/lib/decompress/zstd_decompress.c
* /zstd-1-3-1-tar-gz/zstd-1.3.1/zstd/lib/common/zstd_common.c
* /zstd-1-3-1-tar-gz/zstd-1.3.1/zstd/lib/legacy/zstd_v04.h
* /zstd-1-3-1-tar-gz/zstd-1.3.1/zstd/lib/common/zstd_errors.h
* /zstd-1-3-1-tar-gz/zstd-1.3.1/zstd/lib/legacy/zstd_v07.h
*
/zstd-1-3-1-tar-gz/zstd-1.3.1/zstd/lib/legacy/zstd_legacy.h
* /zstd-1-3-1-tar-gz/zstd-1.3.1/zstd/lib/common/mem.h
* /zstd-1-3-1-tar-gz/zstd-1.3.1/zstd/lib/legacy/zstd_v02.h
* /zstd-1-3-1-tar-gz/zstd-1.3.1/zstd/lib/compress/zstdmt_compress.c
* /zstd-1-3-1-tar-gz/zstd-1.3.1/zstd/lib/legacy/zstd_v01.h
* /zstd-1-3-1-tar-gz/zstd-1.3.1/zstd/lib/compress/zstd_opt.h
* /zstd-1-3-1-tar-gz/zstd-1.3.1/zstd/lib/compress/zstd_compress.c
* /zstd-1-3-1-tar-gz/zstd-1.3.1/zstd/lib/common/error_private.h
* /zstd-1-3-1-tar-gz/zstd-1.3.1/zstd/lib/zstd.h
* /zstd-1-3-1-tar-gz/zstd-1.3.1/zstd/lib/legacy/zstd_v03.h
* /zstd-1-3-1-tar-gz/zstd-1.3.1/zstd/lib/common/pool.h

* /zstd-1-3-1-tar-gz/zstd-1.3.1/zstd/lib/legacy/zstd_v05.h
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- Public forum : https://groups.google.com/forum/#!forum/lz4c
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* /zstd-1-3-1-tar-gz/zstd-1.3.1/zstd/lib/compress/fse_compress.c

1.36 alessandro-c-gomemcached-lock 1.0.0

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1.37 github.com/thanhpk/randstr 1.0.6

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1.38 github.com/alessandro-c/gomemcached-lock 1.0.0

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1.39 github.com/go-redsync/redsync/v4 4.13.0

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1.40 go-retryablehttp 0.7.7

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1.42 alpine-keys 2.5-r0

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1.43 lib-pq 1.10.9

1.43.1 Available under license :

//go:build go1.10
// +build go1.10

package pq

import (
 "context"
 "database/sql/driver"
)

```
// NoticeHandler returns the notice handler on the given connection, if any. A
// runtime panic occurs if c is not a pq connection. This is rarely used
// directly, use ConnectorNoticeHandler and ConnectorWithNoticeHandler instead.
func NoticeHandler(c driver.Conn) func(*Error) {
 return c.(*conn).noticeHandler
}

// SetNoticeHandler sets the given notice handler on the given connection. A
// runtime panic occurs if c is not a pq connection. A nil handler may be used
// to unset it. This is rarely used directly, use ConnectorNoticeHandler and
// ConnectorWithNoticeHandler instead.
//
// Note: Notice handlers are executed synchronously by pq meaning commands
// won't continue to be processed until the handler returns.
func SetNoticeHandler(c driver.Conn, handler func(*Error)) {
 c.(*conn).noticeHandler = handler
}

// NoticeHandlerConnector wraps a regular connector and sets a notice handler
//
 on it.
type NoticeHandlerConnector struct {
 driver.Connector
 noticeHandler func(*Error)
}

// Connect calls the underlying connector's connect method and then sets the
// notice handler.
func (n *NoticeHandlerConnector) Connect(ctx context.Context) (driver.Conn, error) {
 c, err := n.Connector.Connect(ctx)
 if err == nil {
  SetNoticeHandler(c, n.noticeHandler)
 }
 return c, err
}

// ConnectorNoticeHandler returns the currently set notice handler, if any. If
// the given connector is not a result of ConnectorWithNoticeHandler, nil is
// returned.
func ConnectorNoticeHandler(c driver.Connector) func(*Error) {
 if c, ok := c.(*NoticeHandlerConnector); ok {
  return c.noticeHandler
 }
 return nil
}

// ConnectorWithNoticeHandler creates or sets the given handler for the given
```

```
// connector. If the given connector is a result of calling this function
// previously, it is simply set on the given connector and returned. Otherwise,
// this returns a new connector wrapping the given one and
 setting the notice
// handler. A nil notice handler may be used to unset it.
//
// The returned connector is intended to be used with database/sql.OpenDB.
//
// Note: Notice handlers are executed synchronously by pq meaning commands
// won't continue to be processed until the handler returns.
func ConnectorWithNoticeHandler(c driver.Connector, handler func(*Error)) *NoticeHandlerConnector {
 if c, ok := c.(*NoticeHandlerConnector); ok {
  c.noticeHandler = handler
  return c
 }
 return &NoticeHandlerConnector{Connector: c, noticeHandler: handler}
}
```

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1.44 go-rootcerts 1.0.2

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1.45 openssl 3.0.15

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1.47 zlib 1.3.1-r2

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1.48 bash 5.2.37-r0

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1.49 pax-utils 1.3.8-r1

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1.53 ncurses 6.5_p20241006-r3

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1.55 cjson 1.7.18-r0

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1.56 iputils 20240905-r0

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1.57 shadow 4.16.0-r1

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# Contributor: Patrycja Rosa <alpine@ptrcnull.me>
# Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=bsd-compat-headers
pkgver=0.7.2
pkgrel=6
pkgdesc="BSD compatibility headers (cdefs, queue, tree)"
url="https://gitlab.alpinelinux.org/alpine/aports"
arch="noarch"
license="BSD-2-Clause AND BSD-3-Clause"
source="
 cdefs.h
 queue.h
 tree.h
"
builddir="$srcdir"
options="!check" # just headers

package() {
 mkdir -p "$pkgdir"
 install -Dm644 -t "$pkgdir"/usr/include/sys \
  cdefs.h queue.h tree.h
}
sha512sums="
37c8fc73c7aea7b490f7850927e2bb91d12137c9e59e22c084146d515696dbc7973b5de92f4c987ba080dd2502ba8312
7006442c3f019b6447a620c0cae73178  cdefs.h
2f0d5e6e4dc3350285cf17009265dddcbe12431c111868eea39bc8cb038ab7c1f2acacbb21735c4e9d4a1fd106a8fc0f86
11ea33987d4faba37dde5ce6da0750  queue.h
d9ac210d81feb8ad2655bc80fb065d3fe20ae4417b32b4a1711e6738a4870140005c13373b5d1846ef3ce5ae6da45f2da
cef2092881eded0a2e94f6a07752ef3  tree.h
"
# Automatically generated by apkbuild-cpan, template 4
# Contributor: Valery Kartel <valery.kartel@gmail.com>
# Maintainer: Celeste <cielesti@protonmail.com>
```

```
maintainer="Celeste <cielesti@protonmail.com>"
pkgname=perl-bsd-resource
pkgver=1.2911
pkgrel=10
#_pkgreal is used by apkbuild-cpan to find modules at MetaCpan
_pkgreal=BSD-Resource
pkgdesc="Perl extension implements the BSD process resource limit functions"
url="https://metacpan.org/release/BSD-Resource/"
arch="all"
license="Artistic-2.0 OR LGPL-2.0"
depends="perl"
makedepends="perl-dev"
subpackages="$pkgname-doc"
source="https://cpan.metacpan.org/authors/id/J/JH/JHI/BSD-Resource-$pkgver.tar.gz"
builddir="$srcdir/$_pkgreal-$pkgver"

build() {
 export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
 PERL_MM_USE_DEFAULT=1 perl -I. Makefile.PL \
  INSTALLDIRS=vendor \
  NO_PACKLIST=1 \
  NO_PERLLOCAL=1
 make
}

check() {
 export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
 make test
}

package() {
 make DESTDIR="$pkgdir" install
}

sha512sums="
d0032d41c7c0468ed1c6d8f57b885f6cb97a5039d754c8cb60b2067daedaf53bd15fb6561a3d0f828df16dfa5417f663b
8065ba65f4fea16dc9262728b3b6b85
  BSD-Resource-1.2911.tar.gz
"
# Contributor: Fabian Affolter <fabian@affolter-engineering.ch>
# Maintainer: Fabian Affolter <fabian@affolter-engineering.ch>
pkgname=py3-flake8-copyright
_pkgname=flake8-copyright
pkgver=0.2.4
pkgrel=3
pkgdesc="Extension for flake8 which checks for copyrights"
options="!check" # No testsuite
url="https://github.com/savoirfairelinux/flake8-copyright"
```

```
arch="noarch"
license="MIT"
depends="py3-flake8 py3-setuptools"
makedepends="py3-gpep517 py3-wheel"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/${_pkgname:0:1}/$_pkgname/$_pkgname-$pkgver.tar.gz"
builddir="$srcdir"/$_pkgname-$pkgver

replaces="py-flake8-copyright"                  # Backwards compatibility
provides="py-flake8-copyright=$pkgver-r$pkgrel" # Backwards compatibility

build() {
 gpep517 build-wheel \
  --wheel-dir .dist \
  --output-fd 3 3>&1 >&2
}

package() {
 gpep517 install-wheel --destdir "$pkgdir" \
  .dist/*.whl
}

sha512sums="
a6ab47e1bb715618f075c51f398e18180404871b3b0faf1c2d30701d5203db6bc23771bf22ffb5bafcd8ee856b9b64237
b316bd503ae7dceed6ca284ccd5a74d
  flake8-copyright-0.2.4.tar.gz
"
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# Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=py3-license-expression
_pkgname=license_expression
pkgver=30.4.0
pkgrel=0
pkgdesc="Library to parse, compare, simplify and normalize license expressions"
url="https://github.com/nexB/license-expression"
arch="noarch"
license="Apache-2.0"
depends="python3 py3-boolean.py"
```

```
makedepends="py3-setuptools py3-setuptools_scm py3-gpep517 py3-wheel"
checkdepends="py3-pytest py3-pytest-xdist"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/l/$_pkgname/$_pkgname-$pkgver.tar.gz"
builddir="$srcdir/$_pkgname-$pkgver"

build() {
 gpep517 build-wheel \
  --wheel-dir .dist \
  --output-fd 3 3>&1 >&2
}

check() {
 python3 -m venv --clear --without-pip --system-site-packages .testenv
 .testenv/bin/python3 -m installer .dist/*.whl
 .testenv/bin/python3 -m pytest
}

package() {
 python3 -m installer -d "$pkgdir" \
  .dist/*.whl
}

sha512sums="
cc7cd6b5bd8ea4c99b66f074871ffd7cc78b3e8b1b0d3afd9b95efdb7147c8293db2fac977d684fc34d3d60bd79066a06
dc2bff0a38b130d9d83c63538502db1
  license_expression-30.4.0.tar.gz
"
# Contributor: Maxim Karasev <begs@disroot.org>
# Maintainer: mio <miyopan@e.email>
pkgname=bsd-games
pkgver=3.3
pkgrel=2
pkgdesc="traditional text mode games from BSD"
url="https://bsd-games.sourceforge.io/"
arch="all"
license="BSD-3-Clause"
install="$pkgname.post-install"
makedepends="ncurses-dev coreutils" # configure causes busybox expr error
subpackages="$pkgname-doc"
source="https://sourceforge.net/projects/bsd-games/files/bsd-games-$pkgver.tar.gz
 0001-bsd-games-scores-dir.patch
 "
options="!check" # no tests

build() {
 # some GNU autoconf options are ignored, but it works
 ./configure \
```

```
  --build=$CBUILD \
  --host=$CHOST \
  --prefix=/usr \
  --sysconfdir=/etc \
  --mandir=/usr/share/man \
  --scoredir=/usr/share/$pkgname
 make
}

package() {
 make DESTDIR="$pkgdir" install
 install -Dm644 LICENSE "$pkgdir"/usr/share/licenses/bsd-games/LICENSE
}

sha512sums="
aaf36d09d4fe68514a5c279063d7e77a9a9a84c447037cba974b29faa07eb80c2aab2379d0699c196b5c27ffe1b2bb2c6
8d3390143e0e62d5e3d210ccfb61294
  bsd-games-3.3.tar.gz
e1def0d4835a877242c4173fae862e278a7858738e0bacacbb045a42bcabec2aa7c72d000bbd2421ce35fe66cdc1f52c0
577b7e278029ca5ed50f7aab22319f6  0001-bsd-games-scores-dir.patch
"
# Contributor: Carlo Landmeter <clandmeter@alpinelinux.org>
# Maintainer: Kevin Daudt <kdaudt@alpinelinux.org>
pkgname=spdx-licenses
pkgver=3.24.0
pkgrel=0
pkgdesc="Various data formats for the SPDX License List"
url="https://spdx.org/"
arch="noarch"
options="!check" # no test suite
license="CC-BY-3.0"
source="license-list-data-$pkgver.tar.gz::https://github.com/spdx/license-list-data/archive/v$pkgver.tar.gz"
builddir="$srcdir/license-list-data-$pkgver"
subpackages="$pkgname-list"

_types="html json rdfa rdfnt rdfturtle rdfxml template text"

for type in $_types; do
 subpackages="$subpackages $pkgname-$type:_subpkg"
done

package() {
 mkdir -p "$pkgdir"
}

_subpkg() {
 local type=${subpkgname/$pkgname-/}
 pkgdesc="$pkgdesc ($type)"
```

```
 install_if="$pkgname=$pkgver-r$pkgrel"
 mkdir -p "$subpkgdir"/usr/share/spdx
 cp -r "$builddir"/$type "$subpkgdir"/usr/share/spdx/
}

list() {
 pkgdesc="$pkgdesc (licence list)"
 mkdir -p "$subpkgdir"/usr/share/spdx
 local i; for i in "$builddir"/text/*.txt;
 do
  local license=${i##*/}
  echo ${license%.*} >> "$subpkgdir"/usr/share/spdx/license.lst
 done
}

sha512sums="
6eb81424e1b3173dbd8e17859b2e15dfe1c2af8f4da59b7dad0729c038a4cbdba95c34c2c546285fcdbbd41562e39575e
6a6ebb9463b70121e0a12b99d1307e7  license-list-data-3.24.0.tar.gz
"
```

mini_sendmail - accept email on behalf of real sendmail

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1.58 librdkafka 2.6.1-r0

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*/
src/rdxxhash.[ch] src/lz4*.[ch]: git@github.com:lz4/lz4.git 5ff839680134437dbf4678f3d0c7b371d84f4964

LZ4 Library
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parts of src/rdfnv1a.c: http://www.isthe.com/chongo/src/fnv/hash_32a.c

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By:
  chongo <Landon Curt Noll> /\oo/\
  http://www.isthe.com/chongo/

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regexp.c and regexp.h from https://github.com/ccxvii/minilibs sha 875c33568b5a4aa4fb3dd0c52ea98f7f0e5ca684

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"
FindZstd.cmake: git@github.com:facebook/folly.git 87f1a403b49552dae75ae94c8610dd5979913477

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librdkafka - Apache Kafka C driver library

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Upstream-Name: librdkafka
Source: https://github.com/confluentinc/librdkafka

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Files: src/snappy.c src/snappy.h src/snappy_compat.h

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https://github.com/nanopb/nanopb/blob/8ef41e0ebd45daaf19459a011f67e66224b247cd/LICENSE.txt

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parts of src/rdmurmur2.c: git@github.com:abrandoned/murmur2.git

MurMurHash2 Library
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Coda Hale's Golang HdrHistogram https://github.com/codahale/hdrhistogram
at revision 3a0bb77429bd3a61596f5e8a3172445844342120

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From https://github.com/tinycthread/tinycthread/README.txt c57166cd510ffb5022dd5f127489b131b61441b9

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1.59 libncursesw 6.5_p20241006-r3

1.59.1 Available under license :

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```
# ncurses 6.5 - patch 20241006 - Thomas E. Dickey
#
# -----------------------------------------------------------------------------
#
# Ncurses 6.5 is at
#   https://invisible-island.net/archives/ncurses/
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#   https://invisible-island.net/archives/ncurses/6.5
#   https://invisible-mirror.net/archives/ncurses/6.5
#
# -----------------------------------------------------------------------------
# https://invisible-island.net/archives/ncurses/6.5/ncurses-6.5-20241006.patch.gz
# patch by Thomas E. Dickey <dickey@invisible-island.net>
# created  Sun Oct  6 23:44:01 UTC 2024
# -----------------------------------------------------------------------------
# NEWS                        |   6 +++
# VERSION                     |   2 -
# c++/cursesf.cc              |   6 +--
# c++/cursesf.h
                |   6 +--
# c++/cursesm.cc              |   6 +--
# c++/cursesm.h               |   6 +--
# c++/cursesp.cc              |   6 +--
# c++/cursespad.cc            |   6 +--
# c++/cursslk.cc              |  12 +++++----
# c++/cursslk.h               |   6 +--
# dist.mk                     |   4 +-
# misc/terminfo.src           |  23 ++++++++++++--
# ncurses/base/lib_screen.c   |   4 +-
# ncurses/base/new_pair.c     |   4 +-
# ncurses/curses.priv.h       |   4 +-
# ncurses/new_pair.h          |   4 +-
# ncurses/tinfo/trim_sgr0.c   |   7 ++--
# ncurses/tty/lib_twait.c     |   6 +--
# package/debian-mingw/changelog   |   4 +-
# package/debian-mingw64/changelog |   4 +-
# package/debian/changelog         |   4 +-
```

```
# package/mingw-ncurses.nsi       |   4 +-
# package/mingw-ncurses.spec      |   2 -
# package/ncurses.spec            |   2 -
# package/ncursest.spec           |
   2 -
# test/blue.c                     |  10 +++---
# test/bs.c                       |   8 ++--
# test/cardfile.c                 |  12 +++++----
# test/chgat.c                    |   6 +--
# test/clip_printw.c              |   8 ++--
# test/color_name.h               |   6 +--
# test/demo_defkey.c              |   4 +-
# test/demo_forms.c               |  22 ++++++-------
# test/demo_menus.c               |  32 ++++++++++---------
# test/demo_new_pair.c            |   4 +-
# test/demo_panels.c              |  16 ++++-----
# test/demo_termcap.c             |  18 +++++-----
# test/demo_terminfo.c            |  18 +++++-----
# test/dots.c                     |   6 +--
# test/dots_mvcur.c               |   6 +--
# test/dots_termcap.c             |   8 ++--
# test/dup_field.c                |  14 ++++++----
# test/filter.c                   |   6 +--
# test/form_driver_w.c            |   6 +--
# test/gdc.c                      |  10 +++---
# test/inch_wide.c
                |   6 +--
# test/inchs.c                    |   6 +--
# test/ins_wide.c                 |   6 +--
# test/insdelln.c                 |   8 ++--
# test/inserts.c                  |   6 +--
# test/knight.c                   |   7 ++--
# test/list_keys.c                |   8 ++--
# test/move_field.c               |  18 +++++-----
# test/movewindow.c               |  16 ++++-----
# test/ncurses.c                  |  61 ++++++++++++++++++++----------------
# test/padview.c                  |  12 +++++----
# test/parse_rgb.h                |   6 +--
# test/picsmap.c                  |  14 ++++++----
# test/popup_msg.c                |   8 ++--
# test/popup_msg.h                |   6 +--
# test/railroad.c                 |   6 +--
# test/rain.c                     |  20 ++++++------
# test/redraw.c                   |   6 +--
# test/savescreen.c               |  14 ++++++----
# test/tclock.c                   |   4 +-
# test/test.priv.h
```

```
               |  10 +++---
# test/test_add_wchstr.c          |   6 +--
# test/test_addchstr.c            |   6 +--
# test/test_addstr.c              |   6 +--
# test/test_addwstr.c             |   6 +--
# test/test_endwin.c              |   6 +--
# test/test_get_wstr.c            |   8 ++--
# test/test_getstr.c              |   8 ++--
# test/test_instr.c               |   8 ++--
# test/test_inwstr.c              |   8 ++--
# test/test_mouse.c               |   4 +-
# test/test_opaque.c              |   8 ++--
# test/test_sgr.c                 |  26 +++++++--------
# test/test_tparm.c               |  12 +++++----
# test/test_vidputs.c             |   6 +--
# test/testcurs.c                 |   8 ++--
# test/testscanw.c                |   6 +--
# test/view.c                     |  21 +++++-------
# 83 files changed, 392 insertions(+), 369 deletions(-)
# ------------------------------------------------------------------------------
Index: NEWS
Prereq:
  1.4185
--- ncurses-6.5-20240928+/NEWS 2024-09-28 20:27:44.000000000 +0000
+++ ncurses-6.5-20241006/NEWS 2024-10-06 08:53:45.000000000 +0000
@@ -26,7 +26,7 @@
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--------------------------------------------------------------------------------
--- $Id: NEWS,v 1.4185 2024/09/28 20:27:44 tom Exp $
+-- $Id: NEWS,v 1.4188 2024/10/06 08:53:45 tom Exp $
--------------------------------------------------------------------------------

This is a log of changes that ncurses has gone through since Zeyd started
@@ -46,6 +46,10 @@
Changes through 1.9.9e did not credit all contributions;
it is not possible to add this information.

+20241006
+ + fixes for compiler warnings/cppcheck.
+ + use xterm+alt+title in wezterm -TD
+
20240928
 + improve error-message from infocmp when a terminal entry cannot be
   opened (patch by Branden Robinson).
Index:
 VERSION
--- ncurses-6.5-20240928+/VERSION 2024-09-28 09:53:21.000000000 +0000
```

```
+++ ncurses-6.5-20241006/VERSION 2024-10-06 08:53:45.000000000 +0000
@@ -1 +1 @@
-5:0:10 6.5 20240928
+5:0:10 6.5 20241006
Index: c++/cursesf.cc
Prereq:  1.26
--- ncurses-6.5-20240928+/c++/cursesf.cc 2021-04-17 18:11:08.000000000 +0000
+++ ncurses-6.5-20241006/c++/cursesf.cc 2024-10-05 22:47:12.000000000 +0000
@@ -1,6 +1,6 @@
// * this is for making emacs happy: -*-Mode: C++;-*-
/****************************************************************************
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 *                                                                          *
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@@ -36,7 +36,7 @@
#include "cursesf.h"
#include "cursesapp.h"

-MODULE_ID("$Id: cursesf.cc,v 1.26 2021/04/17 18:11:08 tom Exp $")
+MODULE_ID("$Id: cursesf.cc,v 1.27 2024/10/05 22:47:12 tom Exp $")

NCursesFormField::~NCursesFormField () THROWS(NCursesException)
{
@@ -76,7 +76,7 @@

void NCursesForm::setDefaultAttributes()
{
-  NCursesApplication* S = NCursesApplication::getApplication();
+  const NCursesApplication* S = NCursesApplication::getApplication();

  int n = count();
  if (n > 0) {
Index: c++/cursesf.h
Prereq:  1.39
--- ncurses-6.5-20240928+/c++/cursesf.h 2022-08-20 20:52:15.000000000 +0000
+++ ncurses-6.5-20241006/c++/cursesf.h 2024-10-05 22:47:12.000000000 +0000
@@ -1,7 +1,7 @@
// * This makes emacs happy -*-Mode: C++;-*-
// vile:cppmode
/****************************************************************************
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```

```
@@ -33,7 +33,7 @@
 *   Author: Juergen Pfeifer, 1997                                        *
 ****************************************************************************/

-// $Id: cursesf.h,v 1.39 2022/08/20 20:52:15 tom Exp $
+// $Id: cursesf.h,v 1.40 2024/10/05 22:47:12 tom Exp $

#ifndef NCURSES_CURSESF_H_incl
#define NCURSES_CURSESF_H_incl 1
@@ -384,7 +384,7 @@
  }

  inline void *get_user() {
-    UserHook* uptr = reinterpret_cast<UserHook*>(::form_userptr (form));
+    const UserHook* uptr = reinterpret_cast<UserHook*>(::form_userptr (form));
    assert (uptr != 0 && uptr->m_back==this && uptr->m_owner==form);
    return uptr->m_user;
  }
Index: c++/cursesm.cc
Prereq:  1.27
--- ncurses-6.5-20240928+/c++/cursesm.cc 2021-04-17 18:11:08.000000000 +0000
+++ ncurses-6.5-20241006/c++/cursesm.cc 2024-10-05
 22:47:12.000000000 +0000
@@ -1,6 +1,6 @@
// * this is for making emacs happy: -*-Mode: C++;-*-
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@@ -36,7 +36,7 @@
#include "cursesm.h"
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-MODULE_ID("$Id: cursesm.cc,v 1.27 2021/04/17 18:11:08 tom Exp $")
+MODULE_ID("$Id: cursesm.cc,v 1.28 2024/10/05 22:47:12 tom Exp $")

NCursesMenuItem::~NCursesMenuItem() THROWS(NCursesException)
{
@@ -168,7 +168,7 @@
void
NCursesMenu::setDefaultAttributes()
{
-  NCursesApplication* S = NCursesApplication::getApplication();
+
  const NCursesApplication* S = NCursesApplication::getApplication();
  if (S) {
```

```
   ::set_menu_fore(menu, S->foregrounds());
   ::set_menu_back(menu, S->backgrounds());
Index: c++/cursesm.h
Prereq:  1.35
--- ncurses-6.5-20240928+/c++/cursesm.h 2022-08-20 20:52:15.000000000 +0000
+++ ncurses-6.5-20241006/c++/cursesm.h 2024-10-05 22:47:12.000000000 +0000
@@ -1,6 +1,6 @@
// * This makes emacs happy -*-Mode: C++;-*-
/****************************************************************************
- * Copyright 2019-2020,2022 Thomas E. Dickey                                *
+ * Copyright 2019-2022,2024 Thomas E. Dickey                                *
 * Copyright 1998-2012,2014 Free Software Foundation, Inc.                  *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -32,7 +32,7 @@
 *   Author: Juergen Pfeifer, 1997                                          *
 ****************************************************************************/

-// $Id: cursesm.h,v 1.35 2022/08/20 20:52:15 tom Exp $
+// $Id: cursesm.h,v 1.36 2024/10/05 22:47:12 tom Exp $

#ifndef NCURSES_CURSESM_H_incl
#define NCURSES_CURSESM_H_incl 1
@@ -245,7 +245,7 @@
  }

  inline void *get_user() {
-    UserHook* uptr = STATIC_CAST(UserHook*)(::menu_userptr (menu));
+    const UserHook* uptr = STATIC_CAST(UserHook*)(::menu_userptr (menu));
    assert (uptr != 0 && uptr->m_back==this && uptr->m_owner==menu);
    return uptr->m_user;
  }
Index: c++/cursesp.cc
Prereq:  1.27
--- ncurses-6.5-20240928+/c++/cursesp.cc 2020-02-02 23:34:34.000000000 +0000
+++ ncurses-6.5-20241006/c++/cursesp.cc 2024-10-05 22:47:12.000000000 +0000
@@ -1,6 +1,6 @@
// * this is for making emacs happy: -*-Mode: C++;-*-
/****************************************************************************
- * Copyright 2019,2020 Thomas E. Dickey                                     *
+ * Copyright 2019-2020,2024
 Thomas E. Dickey                                *
 * Copyright 1998-2003,2005 Free Software Foundation, Inc.                  *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -35,7 +35,7 @@
#include "internal.h"
#include "cursesp.h"
```

```
-MODULE_ID("$Id: cursesp.cc,v 1.27 2020/02/02 23:34:34 tom Exp $")
+MODULE_ID("$Id: cursesp.cc,v 1.28 2024/10/05 22:47:12 tom Exp $")

NCursesPanel* NCursesPanel::dummy = static_cast<NCursesPanel*>(0);

@@ -64,7 +64,7 @@
void
NCursesPanel::redraw()
{
-  PANEL *pan;
+  const PANEL *pan;

  pan = ::panel_above(NULL);
  while (pan) {
Index: c++/cursespad.cc
Prereq:  1.18
--- ncurses-6.5-20240928+/c++/cursespad.cc 2020-02-02 23:34:34.000000000 +0000
+++ ncurses-6.5-20241006/c++/cursespad.cc 2024-10-05 22:47:12.000000000 +0000
@@ -1,6 +1,6 @@
// * this is for making emacs happy: -*-Mode: C++;-*-
/****************************************************************************
-
 * Copyright 2020 Thomas E. Dickey                                          *
+ * Copyright 2020,2024 Thomas E. Dickey                                     *
 * Copyright 1999-2012,2013 Free Software Foundation, Inc.                  *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -36,7 +36,7 @@

#include <cursesw.h>

-MODULE_ID("$Id: cursespad.cc,v 1.18 2020/02/02 23:34:34 tom Exp $")
+MODULE_ID("$Id: cursespad.cc,v 1.19 2024/10/05 22:47:12 tom Exp $")

NCursesPad::NCursesPad(int nlines, int ncols)
  : NCursesWindow(),
@@ -221,7 +221,7 @@
void NCursesFramedPad::OnOperation(int pad_req)
{
  (void) pad_req;
-  NCursesWindow* W = Win();
+  const NCursesWindow* W = Win();
  NCursesWindow* W2 = getWindow();

  if ((static_cast<NCursesWindow*>(0) != W) && (static_cast<NCursesWindow*>(0) != W2)) {
Index: c++/cursslk.cc
Prereq:
```

```
 1.22
--- ncurses-6.5-20240928+/c++/cursslk.cc 2024-06-15 21:07:30.000000000 +0000
+++ ncurses-6.5-20241006/c++/cursslk.cc 2024-10-05 19:36:22.000000000 +0000
@@ -35,10 +35,10 @@
#include "internal.h"
#include "cursesapp.h"

-MODULE_ID("$Id: cursslk.cc,v 1.22 2024/06/15 21:07:30 tom Exp $")
+MODULE_ID("$Id: cursslk.cc,v 1.23 2024/10/05 19:36:22 tom Exp $")

Soft_Label_Key_Set::Soft_Label_Key&
-  Soft_Label_Key_Set::Soft_Label_Key::operator=(char *text)
+  Soft_Label_Key_Set::Soft_Label_Key::operator=(const char *text)
{
  delete[] label;
  size_t need = 1 + ::strlen(text);
@@ -111,11 +111,11 @@

void Soft_Label_Key_Set::activate_label(int i, bool bf) {
  if (!b_attrInit) {
-    NCursesApplication* A = NCursesApplication::getApplication();
+    const NCursesApplication* A = NCursesApplication::getApplication();
    if (A) attrset(A->labels());
    b_attrInit = TRUE;
  }
-  Soft_Label_Key& K = (*this)[i];
+  const Soft_Label_Key& K = (*this)[i];
  if (ERR==::slk_set(K.num,bf?K.label:"",K.format))
     Error("slk_set");
  noutrefresh();
@@ -124,12 +124,12 @@
void Soft_Label_Key_Set::activate_labels(bool bf)
{
  if (!b_attrInit) {
-    NCursesApplication* A = NCursesApplication::getApplication();
+    const NCursesApplication* A = NCursesApplication::getApplication();
    if (A) attrset(A->labels());
    b_attrInit = TRUE;
  }
  for(int i=1; i <= num_labels; i++) {
-    Soft_Label_Key& K = (*this)[i];
+    const Soft_Label_Key& K = (*this)[i];
    if (ERR==::slk_set(K.num,bf?K.label:"",K.format))
      Error("slk_set");
  }
Index: c++/cursslk.h
Prereq:  1.19
--- ncurses-6.5-20240928+/c++/cursslk.h 2021-04-17 18:11:08.000000000 +0000
```

```
+++ ncurses-6.5-20241006/c++/cursslk.h 2024-10-05 22:47:12.000000000 +0000
@@ -1,7 +1,7 @@
// * this is for making emacs happy: -*-Mode: C++;-*-
// vile:cppmode
/****************************************************************************
- * Copyright 2019-2020,2021 Thomas E. Dickey
          *
+ * Copyright 2019-2021,2024 Thomas E. Dickey                                *
 * Copyright 1998-2003,2005 Free Software Foundation, Inc.                  *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -33,7 +33,7 @@
 *   Author: Juergen Pfeifer, 1997                                          *
 ****************************************************************************/

-// $Id: cursslk.h,v 1.19 2021/04/17 18:11:08 tom Exp $
+// $Id: cursslk.h,v 1.20 2024/10/05 22:47:12 tom Exp $

#ifndef NCURSES_CURSSLK_H_incl
#define NCURSES_CURSSLK_H_incl
@@ -62,7 +62,7 @@

  public:
    // Set the text of the Label
-    Soft_Label_Key& operator=(char *text);
+    Soft_Label_Key& operator=(const char *text);

    // Set the Justification of the Label
    Soft_Label_Key& operator=(Justification just) {
Index: dist.mk
Prereq:  1.1634
--- ncurses-6.5-20240928+/dist.mk 2024-09-28
 09:53:21.000000000 +0000
+++ ncurses-6.5-20241006/dist.mk 2024-10-06 08:53:45.000000000 +0000
@@ -26,7 +26,7 @@
# use or other dealings in this Software without prior written               #
# authorization.                                                             #
##############################################################################
-# $Id: dist.mk,v 1.1634 2024/09/28 09:53:21 tom Exp $
+# $Id: dist.mk,v 1.1636 2024/10/06 08:53:45 tom Exp $
# Makefile for creating ncurses distributions.
#
# This only needs to be used directly as a makefile by developers, but
@@ -38,7 +38,7 @@
# These define the major/minor/patch versions of ncurses.
NCURSES_MAJOR = 6
NCURSES_MINOR = 5
-NCURSES_PATCH = 20240928
```

```
+NCURSES_PATCH = 20241006

# We don't append the patch to the version, since this only applies to releases
VERSION = $(NCURSES_MAJOR).$(NCURSES_MINOR)
Index: misc/terminfo.src
--- ncurses-6.5-20240928+/misc/terminfo.src 2024-09-07 16:23:31.000000000
 +0000
+++ ncurses-6.5-20241006/misc/terminfo.src 2024-10-05 16:04:17.000000000 +0000
@@ -6,8 +6,8 @@
# Report bugs and new terminal descriptions to
# bug-ncurses@gnu.org
#
-# $Revision: 1.1150 $
-# $Date: 2024/09/07 16:23:31 $
+# $Revision: 1.1153 $
+# $Date: 2024/10/05 16:04:17 $
#
# The original header is preserved below for reference.  It is noted that there
# is a "newer" version which differs in some cosmetic details (but actually
@@ -8060,6 +8060,17 @@
# "wezterm is a terminal emulator with support for modern features
#  such as fonts with ligatures, hyperlinks, tabs and multiple windows."
#
+# The documentation bears mention.  It refers to the "ANSI" standard and
+#  https://wezfurlong.org/wezterm/what-is-a-terminal.html#ansi-and-ecma-48
+# X3.64 (withdrawn long ago).  A related website
+# https://github.com/wez/ecma48
+# states that ECMA-48 was issued in 1979 and not revised since.  Actually that
+# was the second revision; the fifth revision in 1991 is current.  The source
+#
 code refers to the second revision in a half-dozen places.  Further, there
+# are three times as many references to Wikipedia as to xterm's documentation.
+# The git commit comments in several instances hint at an incomplete reading
+# of the relevant standards.
+#
# wezterm-20240203-110809-5046fc22 tested with MacOS
# General:
# + initial screensize is now 80x24
@@ -8094,7 +8105,7 @@
# + poor (doesn't copy anyone, most of the results are wrong)
# vttest:
# + DA is VT5xx with sixel, selective erase, user windows, color
-# + DA2 is VT220 version 277
+# + DA2 is VT220 version 277, perhaps a reference to xterm #277
# + only the VT100 character set works, contrary to DA/DA2.
# + no NRCS, either
# + double-sized character work, with some debris
@@ -8136,7 +8147,7 @@
```

```
 use=ansi+rep, use=ansi+sgrdim, use=bracketed+paste,
 use=ecma+index, use=ecma+italics, use=ecma+strikeout,
 use=report+version, use=vt220+cvis,
- use=xterm+256color2, use=xterm+alt1049,
+ use=xterm+256color2,
 use=xterm+alt+title,
 use=xterm+focus, use=xterm+pcc2, use=xterm+pce2,
 use=xterm+pcf2, use=xterm+sl-alt, use=xterm+sm+1006,
 use=xterm+tmux,
@@ -27644,4 +27655,8 @@
# 2024-09-07
# + update comments -TD
#
+# 2024-10-05
+# + use xterm+alt+title in wezterm -TD
+# + update comments -TD
+#
######## SHANTIH!  SHANTIH!  SHANTIH!
Index: ncurses/base/lib_screen.c
Prereq:  1.108
--- ncurses-6.5-20240928+/ncurses/base/lib_screen.c 2024-09-22 20:20:36.000000000 +0000
+++ ncurses-6.5-20241006/ncurses/base/lib_screen.c 2024-10-05 20:47:44.000000000 +0000
@@ -42,7 +42,7 @@
#define CUR SP_TERMTYPE
#endif

-MODULE_ID("$Id: lib_screen.c,v 1.108 2024/09/22 20:20:36 tom Exp $")
+MODULE_ID("$Id: lib_screen.c,v 1.109 2024/10/05 20:47:44 tom Exp $")

#define MAX_SIZE 0x3fff  /* 16k is big enough for a window or pad */

@@ -943,7 +943,7 @@
 * Replace a window covering the whole screen, i.e., newscr or curscr.
 */
static WINDOW *
-replace_window(WINDOW *target, FILE *source)
+replace_window(const
 WINDOW *target, FILE *source)
{
   WINDOW *result = getwin(source);
#if NCURSES_EXT_FUNCS
Index: ncurses/base/new_pair.c
Prereq:  1.24
--- ncurses-6.5-20240928+/ncurses/base/new_pair.c 2024-07-27 19:22:23.000000000 +0000
+++ ncurses-6.5-20241006/ncurses/base/new_pair.c 2024-10-05 20:51:29.000000000 +0000
@@ -61,7 +61,7 @@

#endif
```

```
-MODULE_ID("$Id: new_pair.c,v 1.24 2024/07/27 19:22:23 tom Exp $")
+MODULE_ID("$Id: new_pair.c,v 1.25 2024/10/05 20:51:29 tom Exp $")

#if NCURSES_EXT_COLORS

@@ -193,7 +193,7 @@
 * pair table.
 */
NCURSES_EXPORT(void)
-_nc_reset_color_pair(SCREEN *sp, int pair, colorpair_t * next)
+_nc_reset_color_pair(SCREEN *sp, int pair, const colorpair_t * next)
{
   colorpair_t *last;

Index: ncurses/curses.priv.h
Prereq:  1.691
--- ncurses-6.5-20240928+/ncurses/curses.priv.h 2024-09-28 15:35:01.000000000 +0000
+++ ncurses-6.5-20241006/ncurses/curses.priv.h 2024-10-05 21:01:50.000000000 +0000
@@ -35,7 +35,7 @@
 ********************************************************************************/

/*
- * $Id: curses.priv.h,v 1.691 2024/09/28 15:35:01 tom Exp $
+ * $Id: curses.priv.h,v 1.692 2024/10/05 21:01:50 tom Exp $
 *
 * curses.priv.h
 *
@@ -2170,7 +2170,7 @@
extern NCURSES_EXPORT(int) _nc_read_termcap_entry (const char *const, TERMTYPE2 *const);
extern NCURSES_EXPORT(int) _nc_setup_tinfo(const char *, TERMTYPE2 *);
extern NCURSES_EXPORT(int) _nc_setupscreen (int, int, FILE *, int, int);
-extern NCURSES_EXPORT(int) _nc_timed_wait (SCREEN *, int, int, int * EVENTLIST_2nd(_nc_eventlist *));
+extern NCURSES_EXPORT(int) _nc_timed_wait (const SCREEN *, int, int, int *
EVENTLIST_2nd(_nc_eventlist *));
extern NCURSES_EXPORT(int) _nc_trans_string (char *, const char *);
extern NCURSES_EXPORT(void) _nc_init_termtype (TERMTYPE2 *const);
extern NCURSES_EXPORT(void) _nc_do_color (int, int, int, NCURSES_OUTC);
Index: ncurses/new_pair.h
Prereq:  1.14
--- ncurses-6.5-20240928+/ncurses/new_pair.h 2024-05-25 23:10:33.000000000 +0000
+++
 ncurses-6.5-20241006/ncurses/new_pair.h 2024-10-05 20:57:47.000000000 +0000
@@ -34,7 +34,7 @@
/*
 * Common type definitions and macros for new_pair.c, lib_color.c
 *
- * $Id: new_pair.h,v 1.14 2024/05/25 23:10:33 tom Exp $
```

```
+ * $Id: new_pair.h,v 1.15 2024/10/05 20:57:47 tom Exp $
 */

#ifndef NEW_PAIR_H
@@ -116,7 +116,7 @@
#if NCURSES_EXT_FUNCS && NCURSES_EXT_COLORS
extern NCURSES_EXPORT(void)     _nc_copy_pairs(SCREEN*, colorpair_t*, colorpair_t*, int);
extern NCURSES_EXPORT(void)     _nc_free_ordered_pairs(SCREEN*);
-extern NCURSES_EXPORT(void)     _nc_reset_color_pair(SCREEN*, int, colorpair_t*);
+extern NCURSES_EXPORT(void)     _nc_reset_color_pair(SCREEN*, int, const colorpair_t*);
extern NCURSES_EXPORT(void)     _nc_set_color_pair(SCREEN*, int, int);
#else
#define _nc_free_ordered_pairs(sp) /* nothing */
Index: ncurses/tinfo/trim_sgr0.c
Prereq:  1.23
--- ncurses-6.5-20240928+/ncurses/tinfo/trim_sgr0.c 2024-07-27 19:22:23.000000000 +0000
+++ ncurses-6.5-20241006/ncurses/tinfo/trim_sgr0.c 2024-10-05
 20:53:48.000000000 +0000
@@ -37,7 +37,7 @@

#include <tic.h>

-MODULE_ID("$Id: trim_sgr0.c,v 1.23 2024/07/27 19:22:23 tom Exp $")
+MODULE_ID("$Id: trim_sgr0.c,v 1.24 2024/10/05 20:53:48 tom Exp $")

#undef CUR
#define CUR tp->
@@ -237,12 +237,10 @@

    if (PRESENT(exit_attribute_mode)
 && PRESENT(set_attributes)) {
- bool found = FALSE;
 char *on = set_attribute_9(tp, 1);
 char *off = set_attribute_9(tp, 0);
 char *end = strdup(exit_attribute_mode);
 char *tmp;
- size_t i, j, k;

 TR(TRACE_DATABASE, ("checking if we can trim sgr0 based on sgr"));
 TR(TRACE_DATABASE, ("sgr0       %s", _nc_visbuf(end)));
@@ -255,6 +253,9 @@
     FreeIfNeeded(off);
 } else if (similar_sgr(off, end)
     && !similar_sgr(off, on)) {
+    bool found = FALSE;
+    size_t i, j, k;
+
     TR(TRACE_DATABASE, ("adjusting sgr(9:off) : %s", _nc_visbuf(off)));
```

```
    result = off;
    /*
Index: ncurses/tty/lib_twait.c
Prereq:  1.81
--- ncurses-6.5-20240928+/ncurses/tty/lib_twait.c 2023-09-16
 16:30:40.000000000 +0000
+++ ncurses-6.5-20241006/ncurses/tty/lib_twait.c 2024-10-05 22:47:12.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2018-2020,2023 Thomas E. Dickey                                *
+ * Copyright 2018-2023,2024 Thomas E. Dickey                                *
 * Copyright 1998-2015,2016 Free Software Foundation, Inc.                  *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -76,7 +76,7 @@
#endif
#undef CUR

-MODULE_ID("$Id: lib_twait.c,v 1.81 2023/09/16 16:30:40 tom Exp $")
+MODULE_ID("$Id: lib_twait.c,v 1.82 2024/10/05 22:47:12 tom Exp $")

/*
 * Returns an elapsed time, in milliseconds (if possible).
@@ -168,7 +168,7 @@
 * descriptors.
 */
NCURSES_EXPORT(int)
-_nc_timed_wait(SCREEN *sp MAYBE_UNUSED,
+_nc_timed_wait(const
 SCREEN *sp MAYBE_UNUSED,
        int mode MAYBE_UNUSED,
        int milliseconds,
        int *timeleft
Index: package/debian-mingw/changelog
--- ncurses-6.5-20240928+/package/debian-mingw/changelog 2024-09-28 09:53:21.000000000 +0000
+++ ncurses-6.5-20241006/package/debian-mingw/changelog 2024-10-06 08:53:45.000000000 +0000
@@ -1,8 +1,8 @@
-ncurses6td (6.5+20240928) unstable; urgency=low
+ncurses6td (6.5+20241006) unstable; urgency=low

  * latest weekly patch

- -- Thomas E. Dickey <dickey@invisible-island.net>  Sat, 28 Sep 2024 05:53:21 -0400
+ -- Thomas E. Dickey <dickey@invisible-island.net>  Sun, 06 Oct 2024 04:53:45 -0400

ncurses6 (5.9+20131005) unstable; urgency=low

Index: package/debian-mingw64/changelog
```

```
--- ncurses-6.5-20240928+/package/debian-mingw64/changelog 2024-09-28 09:53:21.000000000 +0000
+++ ncurses-6.5-20241006/package/debian-mingw64/changelog 2024-10-06 08:53:45.000000000 +0000
@@ -1,8 +1,8 @@
-ncurses6td (6.5+20240928) unstable; urgency=low
+ncurses6td
 (6.5+20241006) unstable; urgency=low

  * latest weekly patch

- -- Thomas E. Dickey <dickey@invisible-island.net>  Sat, 28 Sep 2024 05:53:21 -0400
+ -- Thomas E. Dickey <dickey@invisible-island.net>  Sun, 06 Oct 2024 04:53:45 -0400

ncurses6 (5.9+20131005) unstable; urgency=low

Index: package/debian/changelog
--- ncurses-6.5-20240928+/package/debian/changelog 2024-09-28 09:53:21.000000000 +0000
+++ ncurses-6.5-20241006/package/debian/changelog 2024-10-06 08:53:45.000000000 +0000
@@ -1,8 +1,8 @@
-ncurses6td (6.5+20240928) unstable; urgency=low
+ncurses6td (6.5+20241006) unstable; urgency=low

  * latest weekly patch

- -- Thomas E. Dickey <dickey@invisible-island.net>  Sat, 28 Sep 2024 05:53:21 -0400
+ -- Thomas E. Dickey <dickey@invisible-island.net>  Sun, 06 Oct 2024 04:53:45 -0400

ncurses6 (5.9+20120608) unstable; urgency=low

Index: package/mingw-ncurses.nsi
Prereq:  1.669
--- ncurses-6.5-20240928+/package/mingw-ncurses.nsi 2024-09-28 09:53:21.000000000 +0000
+++
 ncurses-6.5-20241006/package/mingw-ncurses.nsi 2024-10-06 08:53:45.000000000 +0000
@@ -1,4 +1,4 @@
-; $Id: mingw-ncurses.nsi,v 1.669 2024/09/28 09:53:21 tom Exp $
+; $Id: mingw-ncurses.nsi,v 1.671 2024/10/06 08:53:45 tom Exp $

; TODO add examples
; TODO bump ABI to 6
@@ -10,7 +10,7 @@
!define VERSION_MINOR "5"
!define VERSION_YYYY  "2024"
-!define VERSION_MMDD  "0928"
+!define VERSION_MMDD  "1006"
!define VERSION_PATCH ${VERSION_YYYY}${VERSION_MMDD}

!define MY_ABI   "5"
```

```
Index: package/mingw-ncurses.spec
--- ncurses-6.5-20240928+/package/mingw-ncurses.spec 2024-09-28 09:53:21.000000000 +0000
+++ ncurses-6.5-20241006/package/mingw-ncurses.spec 2024-10-06 08:53:45.000000000 +0000
@@ -3,7 +3,7 @@
Summary: shared libraries for terminal handling
Name: mingw32-ncurses6
Version: 6.5
-Release: 20240928
+Release: 20241006
License: X11
Group: Development/Libraries
URL: https://invisible-island.net/ncurses/
Index: package/ncurses.spec
--- ncurses-6.5-20240928+/package/ncurses.spec 2024-09-28
 09:53:21.000000000 +0000
+++ ncurses-6.5-20241006/package/ncurses.spec 2024-10-06 08:53:45.000000000 +0000
@@ -1,7 +1,7 @@
Summary: shared libraries for terminal handling
Name: ncurses6
Version: 6.5
-Release: 20240928
+Release: 20241006
License: X11
Group: Development/Libraries
URL: https://invisible-island.net/ncurses/
Index: package/ncursest.spec
--- ncurses-6.5-20240928+/package/ncursest.spec 2024-09-28 09:53:21.000000000 +0000
+++ ncurses-6.5-20241006/package/ncursest.spec 2024-10-06 08:53:45.000000000 +0000
@@ -1,7 +1,7 @@
Summary: Curses library with POSIX thread support.
Name: ncursest6
Version: 6.5
-Release: 20240928
+Release: 20241006
License: X11
Group: Development/Libraries
Source: ncurses-%{version}-%{release}.tgz
Index: test/blue.c
Prereq:  1.55
--- ncurses-6.5-20240928+/test/blue.c 2022-12-10 23:31:31.000000000 +0000
+++ ncurses-6.5-20241006/test/blue.c 2024-10-05 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
-
 * Copyright 2019-2021,2022 Thomas E. Dickey                                *
+ * Copyright 2019-2022,2024 Thomas E. Dickey                                *
 * Copyright 1998-2016,2017 Free Software Foundation, Inc.                  *
 *                                                                          *
```

```
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -37,7 +37,7 @@
 ****************************************************************************/

/*
- * $Id: blue.c,v 1.55 2022/12/10 23:31:31 tom Exp $
+ * $Id: blue.c,v 1.56 2024/10/05 19:26:24 tom Exp $
 */

#include <test.priv.h>
@@ -437,7 +437,7 @@
static void
use_pc_display(void)
{
-    char *check = nl_langinfo(CODESET);
+    const char *check = nl_langinfo(CODESET);
    if (!strcmp(check, "UTF-8")) {
#if USE_WIDEC_SUPPORT
 suits = uglyphs;
@@ -448,8 +448,8 @@
     !strcmp(check, "CP437") ||
     !strcmp(check,
 "IBM850") ||
     !strcmp(check, "CP850")) {
-     char *smacs = tigetstr("smacs");
-     char *smpch = tigetstr("smpch");
+     const char *smacs = tigetstr("smacs");
+     const char *smpch = tigetstr("smpch");
     /*
      * The ncurses library makes this check to decide whether to allow
      * the alternate character set for the (normally) nonprinting codes.
Index: test/bs.c
Prereq:  1.79
--- ncurses-6.5-20240928+/test/bs.c 2023-05-27 20:13:10.000000000 +0000
+++ ncurses-6.5-20241006/test/bs.c 2024-10-05 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2018-2022,2023 Thomas E. Dickey                                *
+ * Copyright 2018-2023,2024 Thomas E. Dickey                                *
 * Copyright 1998-2016,2017 Free Software Foundation, Inc.                  *
 *                                                                          *
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 to any person obtaining a  *
@@ -35,7 +35,7 @@
 * v2.0 featuring strict ANSI/POSIX conformance, November 1993.
 * v2.1 with ncurses mouse support, September 1995
 *
- * $Id: bs.c,v 1.79 2023/05/27 20:13:10 tom Exp $
```

```
+ * $Id: bs.c,v 1.80 2024/10/05 19:26:24 tom Exp $
 */

#include <test.priv.h>
@@ -147,7 +147,7 @@
    bool placed;  /* has it been placed on the board? */
} ship_t;

-static bool checkplace(int b, ship_t * ss, int vis);
+static bool checkplace(int b, const ship_t * ss, int vis);

#define SHIPIT(name, symbol, length) { name, 0, symbol, length, 0,0, 0, FALSE }

@@ -686,7 +686,7 @@
}

static bool
-checkplace(int b, ship_t * ss, int vis)
+checkplace(int b, const ship_t * ss, int vis)
{
    int l, xend, yend;

Index: test/cardfile.c
Prereq:  1.51
--- ncurses-6.5-20240928+/test/cardfile.c 2022-12-04 00:40:11.000000000 +0000
+++ ncurses-6.5-20241006/test/cardfile.c 2024-10-05 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
-
 * Copyright 2019-2021,2022 Thomas E. Dickey                                *
+ * Copyright 2019-2022,2024 Thomas E. Dickey                                *
 * Copyright 1999-2016,2017 Free Software Foundation, Inc.                  *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -30,7 +30,7 @@
/*
 * Author: Thomas E. Dickey
 *
- * $Id: cardfile.c,v 1.51 2022/12/04 00:40:11 tom Exp $
+ * $Id: cardfile.c,v 1.52 2024/10/05 19:26:24 tom Exp $
 *
 * File format: text beginning in column 1 is a title; other text is content.
 */
@@ -161,7 +161,7 @@
}

static CARD *
-find_card(char *title)
```

```
+find_card(const char *title)
{
   CARD *card;

@@ -173,7 +173,7 @@
}

static void
-read_data(char *fname)
+read_data(const char *fname)
{
   FILE *fp;

@@ -341,7 +341,7 @@
}

static FIELD **
-make_fields(CARD * p, int form_high,
 int form_wide)
+make_fields(const CARD * p, int form_high, int form_wide)
{
   FIELD **f = typeCalloc(FIELD *, (size_t) 3);

@@ -385,7 +385,7 @@
/****************************************************************************/

static void
-cardfile(char *fname)
+cardfile(const char *fname)
{
   WINDOW *win;
   CARD *p;
Index: test/chgat.c
Prereq:  1.21
--- ncurses-6.5-20240928+/test/chgat.c 2024-06-29 17:45:32.000000000 +0000
+++ ncurses-6.5-20241006/test/chgat.c 2024-10-06 22:35:55.000000000 +0000
@@ -27,7 +27,7 @@
 * authorization.                                           *
 ****************************************************************************/
/*
- * $Id: chgat.c,v 1.21 2024/06/29 17:45:32 tom Exp $
+ * $Id: chgat.c,v 1.23 2024/10/06 22:35:55 tom Exp $
 *
 * test-driver for chgat/wchgat/mvchgat/mvwchgat
 */
@@ -160,7 +160,7 @@
}
```

```
static void
-do_subwindow(WINDOW *win, STATUS * sp, void func(WINDOW *))
+do_subwindow(WINDOW *win, const STATUS
 * sp, void func(WINDOW *))
{
   WINDOW *win1 = newwin(sp->y_max - 2, sp->x_max - 2,
    sp->y_beg + 1, sp->x_beg + 1);
@@ -204,7 +204,7 @@
static void
show_help(WINDOW *win)
{
-   static const char *msgs[] =
+   static NCURSES_CONST char *msgs[] =
   {
 "Basic commands:"
 ,"Use h/j/k/l or arrow keys to move the cursor."
Index: test/clip_printw.c
Prereq:  1.23
--- ncurses-6.5-20240928+/test/clip_printw.c 2023-09-30 19:57:44.000000000 +0000
+++ ncurses-6.5-20241006/test/clip_printw.c 2024-10-06 22:36:25.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2019-2022,2023 Thomas E. Dickey                                *
+ * Copyright 2019-2023,2024 Thomas E. Dickey                                *
 * Copyright 2008-2016,2017 Free Software Foundation, Inc.                  *
 *                                                                          *
 * Permission is hereby granted, free of charge,
 to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                           *
 ****************************************************************************/
/*
- * $Id: clip_printw.c,v 1.23 2023/09/30 19:57:44 tom Exp $
+ * $Id: clip_printw.c,v 1.25 2024/10/06 22:36:25 tom Exp $
 *
 * demonstrate how to use printw with/without wrapping.
 */
@@ -212,7 +212,7 @@
}

static void
-do_subwindow(WINDOW *win, STATUS * sp, void func(WINDOW *))
+do_subwindow(WINDOW *win, const STATUS * sp, void func(WINDOW *))
{
   WINDOW *win1 = newwin(sp->y_max - (2 * MARGIN),
    sp->x_max - (2 * MARGIN),
@@ -268,7 +268,7 @@
static void
```

```
show_help(WINDOW *win)
{
-    static const char *msgs[] =
+    static NCURSES_CONST char *msgs[] =
     {
 "Basic commands:"
 ,"Use h/j/k/l or arrow keys to move the cursor."
Index: test/color_name.h
Prereq:  1.9
--- ncurses-6.5-20240928+/test/color_name.h 2021-04-24 23:25:29.000000000 +0000
+++ ncurses-6.5-20241006/test/color_name.h 2024-10-05
 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/*****************************************************************************
- * Copyright 2018-2020,2021 Thomas E. Dickey                                 *
+ * Copyright 2018-2021,2024 Thomas E. Dickey                                 *
 * Copyright 2011-2012,2016 Free Software Foundation, Inc.                   *
 *                                                                           *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                            *
 *****************************************************************************/
/*
- * $Id: color_name.h,v 1.9 2021/04/24 23:25:29 tom Exp $
+ * $Id: color_name.h,v 1.10 2024/10/05 19:26:24 tom Exp $
 */

#ifndef __COLORNAME_H
@@ -63,7 +63,6 @@
{
    int result = 0;
    char *endp = 0;
-    size_t n;

    if ((result = (int) strtol(color,
 &endp, 0)) >= 0
 && (endp == 0 || *endp == 0)) {
@@ -71,6 +70,7 @@
    } else if (!strcmp(color, "default")) {
 result = -1;
    } else {
+ size_t n;
 for (n = 0; n < SIZEOF(the_color_names); ++n) {
     if (!strcmp(the_color_names[n], color)) {
  result = (int) n;
Index: test/demo_defkey.c
Prereq:  1.35
--- ncurses-6.5-20240928+/test/demo_defkey.c 2024-01-20 20:46:12.000000000 +0000
```

```
+++ ncurses-6.5-20241006/test/demo_defkey.c 2024-10-05 18:20:04.000000000 +0000
@@ -27,7 +27,7 @@
 * authorization.                                           *
 ****************************************************************************/
/*
- * $Id: demo_defkey.c,v 1.35 2024/01/20 20:46:12 tom Exp $
+ * $Id: demo_defkey.c,v 1.36 2024/10/05 18:20:04 tom Exp $
 *
 * Demonstrate the define_key() function.
 * Thomas Dickey - 2002/11/23
@@ -199,7 +199,7 @@
}

static void
-redefine(WINDOW *win, char *string, int code)
+redefine(WINDOW *win, const char *string, int code)
{

  really_define_key(win, string, code);
}
Index: test/demo_forms.c
Prereq:  1.63
--- ncurses-6.5-20240928+/test/demo_forms.c 2023-11-11 00:29:53.000000000 +0000
+++ ncurses-6.5-20241006/test/demo_forms.c 2024-10-06 21:15:12.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2018-2022,2023 Thomas E. Dickey                                *
+ * Copyright 2018-2023,2024 Thomas E. Dickey                                *
 * Copyright 2003-2016,2017 Free Software Foundation, Inc.                  *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                           *
 ****************************************************************************/
/*
- * $Id: demo_forms.c,v 1.63 2023/11/11 00:29:53 tom Exp $
+ * $Id: demo_forms.c,v 1.67
 2024/10/06 21:15:12 tom Exp $
 *
 * Demonstrate a variety of functions from the form library.
 * Thomas Dickey - 2003/4/26
@@ -148,7 +148,7 @@
}

static FIELD *
-make_label(const char *label, int frow, int fcol)
+make_label(NCURSES_CONST char *label, int frow, int fcol)
{
```

```
   FIELD *f = new_field(1, (int) strlen(label), frow, fcol, 0, 0);

@@ -242,7 +242,7 @@
#define O_SELECTABLE (O_ACTIVE | O_VISIBLE)

static FIELD *
-another_field(FORM *form, const FIELD *const field)
+another_field(NCURSES_CONST FORM *form, NCURSES_CONST FIELD *const field)
{
   FIELD **f = form_fields(form);
   FIELD *result = 0;
@@ -306,9 +306,9 @@
}

static void
-show_current_field(WINDOW *win, FORM *form)
+show_current_field(WINDOW *win, NCURSES_CONST FORM *form)
{
-    FIELD *field;
+    NCURSES_CONST FIELD *field;
    int field_rows, field_cols, field_max;
    int currow, curcol;

@@ -325,7 +325,7 @@
    waddch(win, '\n');

    if ((field = current_field(form)) != 0) {
- FIELDTYPE *type;
+ NCURSES_CONST
 FIELDTYPE *type;
 int nbuf;

 wprintw(win, "Page %d%s, Field %d/%d%s:",
@@ -383,7 +383,7 @@

 waddstr(win, "\n");
 for (nbuf = 0; nbuf <= 2; ++nbuf) {
-     char *buffer;
+     NCURSES_CONST char *buffer;
     if ((buffer = field_buffer(field, nbuf)) != 0) {
  wprintw(win, "buffer %d:", nbuf);
  (void) wattrset(win, A_REVERSE);
@@ -408,8 +408,8 @@
    int c;
    unsigned n = 0;
    int pg;
-    const char *fname;
-    static const char *my_enum[] =
```

```
+    NCURSES_CONST char *fname;
+    static NCURSES_CONST char *my_enum[] =
     {"first", "second", "third", 0};

#ifdef NCURSES_MOUSE_VERSION
@@ -515,7 +515,7 @@
    f[n] = (FIELD *) 0;

    if ((form = new_form(f)) != 0) {
- WINDOW *w;
+ NCURSES_CONST WINDOW *w;
  WINDOW *also;
  int finished = 0;

Index: test/demo_menus.c
Prereq:  1.80
--- ncurses-6.5-20240928+/test/demo_menus.c 2023-05-27 20:13:10.000000000 +0000
+++ ncurses-6.5-20241006/test/demo_menus.c 2024-10-06 19:58:28.000000000 +0000
@@ -1,5
 +1,5 @@
/****************************************************************************
- * Copyright 2019-2022,2023 Thomas E. Dickey                                *
+ * Copyright 2019-2023,2024 Thomas E. Dickey                                *
  * Copyright 2003-2016,2017 Free Software Foundation, Inc.                  *
  *                                                                          *
  * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
  * authorization.                                                           *
  ****************************************************************************/
/*
- * $Id: demo_menus.c,v 1.80 2023/05/27 20:13:10 tom Exp $
+ * $Id: demo_menus.c,v 1.82 2024/10/06 19:58:28 tom Exp $
  *
  * Demonstrate a variety of functions from the menu library.
  * Thomas Dickey - 2005/4/9
@@ -185,7 +185,7 @@
}

static int
-menu_getc(MENU * m)
+menu_getc(NCURSES_CONST MENU * m)
{
    return wGetchar(menu_win(m));
  }
@@ -214,7 +214,7 @@
my_menu_init(MENU * menu)
{
    Trace(("called MenuHook my_menu_init"));
```

```
-    mvwprintw(status, 2, 0, "menu_init %p", (void *) menu);
+    mvwprintw(status, 2, 0, "menu_init %p", (const void *) menu);
    wclrtoeol(status);
    wrefresh(status);
}
@@ -223,7 +223,7 @@
my_menu_term(MENU * menu)
{
    Trace(("called MenuHook my_menu_term"));
-    mvwprintw(status, 2, 0, "menu_term %p", (void *) menu);
+    mvwprintw(status, 2, 0, "menu_term %p", (const void *) menu);
    wclrtoeol(status);
    wrefresh(status);
}
@@ -231,7 +231,7 @@
static void
my_item_init(MENU * menu)
{
-    ITEM *item = current_item(menu);
+    NCURSES_CONST ITEM *item = current_item(menu);
    const char *name = item_name(item);

    Trace(("called MenuHook my_item_init (%s)", name));
@@ -243,7 +243,7 @@
static void
my_item_term(MENU * menu)
{
-    ITEM *item = current_item(menu);
+    NCURSES_CONST ITEM *item = current_item(menu);
    const char *name = item_name(item);

    Trace(("called MenuHook my_item_term (%s)", name));
@@ -348,7 +348,7 @@

/* force the given menu to appear */
static void
-menu_display(MENU * m)
+menu_display(NCURSES_CONST MENU * m)
{
    touchwin(menu_win(m));
    wrefresh(menu_win(m));
@@ -584,10 +584,10 @@
 * the others
 */
static bool
-update_trace_menu(MENU * m)
+update_trace_menu(NCURSES_CONST MENU * m)
{
```

```
   ITEM **items;
-    ITEM *i;
+    NCURSES_CONST ITEM *i;
   bool changed = FALSE;

   items = menu_items(m);
@@ -613,7 +613,7 @@
   int result;

   for (ip = menu_items(mpTrace); *ip; ip++) {
- MENU_DATA *td = (MENU_DATA *) item_userptr(*ip);
+ NCURSES_CONST MENU_DATA *td = (MENU_DATA *) item_userptr(*ip);
  unsigned mask = td->mask;
  if (mask == 0)
     set_item_value(*ip, _nc_tracing == 0);
@@ -628,7 +628,7 @@
     unsigned newtrace = 0;
     for (ip = menu_items(mpTrace); *ip; ip++) {
   if (item_value(*ip)) {
-      MENU_DATA *td = (MENU_DATA *) item_userptr(*ip);
+      NCURSES_CONST
  MENU_DATA *td = (MENU_DATA *) item_userptr(*ip);
      newtrace |= td->mask;
   }
    }
@@ -718,7 +718,9 @@
 }

 static int
-move_menu(MENU * menu, MENU * current, int by_y, int by_x)
+move_menu(NCURSES_CONST MENU * menu,
+   NCURSES_CONST MENU * current,
+   int by_y, int by_x)
 {
   WINDOW *top_win = menu_win(menu);
   WINDOW *sub_win = menu_sub(menu);
@@ -798,7 +800,7 @@
 #endif /* defined(KEY_RESIZE) && NCURSES_EXT_FUNCS */

 static void
-show_status(int ch, MENU * menu)
+show_status(int ch, NCURSES_CONST MENU * menu)
 {
   wmove(status, 0, 0);
   wprintw(status, "key %s, menu %d, mark %s, match %s",
@@ -919,7 +921,7 @@
  wrefresh(menu_win(last_menu));
  if (code == E_UNKNOWN_COMMAND
```

```
    || code == E_NOT_POSTED) {
-    ITEM *item = current_item(last_menu);
+    NCURSES_CONST ITEM *item = current_item(last_menu);
    MENU_DATA *td = (MENU_DATA *) item_userptr(item);
    td->func((int) td->mask);
 }
Index: test/demo_new_pair.c
Prereq:  1.28
--- ncurses-6.5-20240928+/test/demo_new_pair.c 2024-06-29
 19:30:26.000000000 +0000
+++ ncurses-6.5-20241006/test/demo_new_pair.c 2024-10-05 18:21:44.000000000 +0000
@@ -27,7 +27,7 @@
 * authorization.                                           *
 ****************************************************************************/
/*
- * $Id: demo_new_pair.c,v 1.28 2024/06/29 19:30:26 tom Exp $
+ * $Id: demo_new_pair.c,v 1.29 2024/10/05 18:21:44 tom Exp $
 *
 * Demonstrate the alloc_pair() function.
 */
@@ -49,7 +49,7 @@
static bool
valid_cap(NCURSES_CONST char *name)
{
-    char *value = tigetstr(name);
+    const char *value = tigetstr(name);
    return (value != 0 && value != (char *) -1) ? TRUE : FALSE;
}

Index: test/demo_panels.c
Prereq:  1.48
--- ncurses-6.5-20240928+/test/demo_panels.c 2022-12-04 00:40:11.000000000 +0000
+++ ncurses-6.5-20241006/test/demo_panels.c 2024-10-06 20:01:21.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
-
 * Copyright 2018-2020,2022 Thomas E. Dickey                                *
+ * Copyright 2018-2022,2024 Thomas E. Dickey                                *
 * Copyright 2003-2016,2017 Free Software Foundation, Inc.                  *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                           *
 ****************************************************************************/
/*
- * $Id: demo_panels.c,v 1.48 2022/12/04 00:40:11 tom Exp $
+ * $Id: demo_panels.c,v 1.50 2024/10/06 20:01:21 tom Exp $
 *
```

```
 * Demonstrate a variety of functions from the panel library.
 */
@@ -42,7 +42,7 @@
#define TEMP_POS '>'

typedef void (*InitPanel) (void);
-typedef void (*FillPanel) (PANEL *);
+typedef void (*FillPanel) (NCURSES_CONST PANEL *);

static bool use_colors = FALSE;
static bool
 unboxed = FALSE;
@@ -301,7 +301,7 @@
 int code;
 int y0, x0;
 int y1, x1;
- WINDOW *win = panel_window(pans[which]);
+ NCURSES_CONST WINDOW *win = panel_window(pans[which]);
 char also[80];

 getbegyx(win, y0, x0);
@@ -368,7 +368,7 @@
}

static void
-fill_panel(PANEL *pan)
+fill_panel(NCURSES_CONST PANEL *pan)
{
   WINDOW *win = panel_window(pan);
   const char *userptr = (const char *) panel_userptr(pan);
@@ -388,7 +388,7 @@
}

static void
-fill_unboxed(PANEL *pan)
+fill_unboxed(NCURSES_CONST PANEL *pan)
{
   WINDOW *win = panel_window(pan);
   const char *userptr = (const char *) panel_userptr(pan);
@@ -431,7 +431,7 @@
}

static void
-fill_wide_panel(PANEL *pan)
+fill_wide_panel(NCURSES_CONST PANEL *pan)
{
   WINDOW *win = panel_window(pan);
   int num = ((const char *) panel_userptr(pan))[1];
```

```
@@ -453,7 +453,7 @@
#define MAX_PANELS 5

static int
-which_panel(PANEL *px[MAX_PANELS + 1], PANEL *pan)
+which_panel(PANEL *px[MAX_PANELS + 1], NCURSES_CONST
 PANEL *pan)
{
   int result = 0;
   int j;
Index: test/demo_termcap.c
Prereq:  1.65
--- ncurses-6.5-20240928+/test/demo_termcap.c 2023-05-27 20:13:10.000000000 +0000
+++ ncurses-6.5-20241006/test/demo_termcap.c 2024-10-06 20:05:09.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2019-2022,2023 Thomas E. Dickey                                *
+ * Copyright 2019-2023,2024 Thomas E. Dickey                                *
 * Copyright 2005-2016,2017 Free Software Foundation, Inc.                  *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -30,7 +30,7 @@
/*
 * Author: Thomas E. Dickey
 *
- * $Id: demo_termcap.c,v 1.65 2023/05/27 20:13:10 tom Exp $
+ * $Id: demo_termcap.c,v 1.70 2024/10/06 20:05:09 tom Exp $
 *
 * A simple demo of the termcap interface.
 */
@@ -256,7 +256,7 @@

   * to hold all of the strings extracted from the terminal entry.
    */
   char area[1024], *ap = area;
-   char *str;
+    NCURSES_CONST char *str;
   int num;

   if ((str = tgetstr(cap, &ap)) != 0) {
@@ -289,7 +289,7 @@
}

static void
-brute_force(const char *name)
+brute_force(NCURSES_CONST char *name)
{
   char buffer[1024];
```

```
@@ -369,7 +369,7 @@
#ifdef NCURSES_VERSION
 if (x_opt && (my_blob == 0) && y_opt) {
#if NCURSES_XNAMES
-    TERMTYPE *term = (TERMTYPE *) cur_term;
+    NCURSES_CONST TERMTYPE *term = (TERMTYPE *) cur_term;
    if (term != 0
  && ((NUM_BOOLEANS(term) != BOOLCOUNT)
     || (NUM_NUMBERS(term) != NUMCOUNT)
@@ -781,12 +781,12 @@
{
   int ch;
   int n;
-   char *name;
+   NCURSES_CONST char *name;
   bool a_opt = FALSE;
#if defined(NCURSES_VERSION) || defined(HAVE_CURSES_DATA_OSPEED)
   bool v_opt = FALSE;
#endif
-   char *input_name = 0;
+   NCURSES_CONST char *input_name = 0;

   int repeat;
   int r_opt = 1;
@@ -867,7
 +867,7 @@
    } else if ((name = getenv("TERM")) != 0) {
  brute_force(name);
    } else {
-  static char dumb[] = "dumb";
+  static NCURSES_CONST char dumb[] = "dumb";
  brute_force(dumb);
    }
 }
@@ -894,7 +894,7 @@
    } else if ((name = getenv("TERM")) != 0) {
  demo_termcap(name);
    } else {
-  static char dumb[] = "dumb";
+  static NCURSES_CONST char dumb[] = "dumb";
  demo_termcap(dumb);
    }
 }
Index: test/demo_terminfo.c
Prereq:  1.57
--- ncurses-6.5-20240928+/test/demo_terminfo.c 2023-05-27 20:13:10.000000000 +0000
+++ ncurses-6.5-20241006/test/demo_terminfo.c 2024-10-06 21:16:43.000000000 +0000
```

```
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2019-2022,2023 Thomas E. Dickey                                *
+ * Copyright 2019-2023,2024 Thomas E. Dickey                                *
 * Copyright 2009-2016,2017 Free Software Foundation, Inc.                  *
 *                                                                          *
                                      *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -30,7 +30,7 @@
/*
 * Author: Thomas E. Dickey
 *
- * $Id: demo_terminfo.c,v 1.57 2023/05/27 20:13:10 tom Exp $
+ * $Id: demo_terminfo.c,v 1.59 2024/10/06 21:16:43 tom Exp $
 *
 * A simple demo of the terminfo interface.
 */
@@ -253,7 +253,7 @@
#define LegalItem(c,n) (n)

static void
-brute_force(const char *name)
+brute_force(NCURSES_CONST char *name)
{
#define MAX_FORCE 5  /* omit "colors", since CPU-time is a problem */
   static const char legal[] = "\
@@ -324,7 +324,7 @@
#endif

static void
-demo_terminfo(char *name)
+demo_terminfo(NCURSES_CONST char *name)
{
   unsigned n;
   NCURSES_CONST char *cap;
@@ -366,7 +366,7 @@
   if (x_opt && (my_blob == 0)) {
 if (y_opt) {
#if NCURSES_XNAMES
-    TERMTYPE *term = (TERMTYPE *) cur_term;
+    const TERMTYPE *term = (TERMTYPE *) cur_term;
    if (term != 0
  && ((NUM_BOOLEANS(term)
 != BOOLCOUNT)
     || (NUM_NUMBERS(term) != NUMCOUNT)
@@ -813,9 +813,9 @@
   int ch;
   int n;
```

```
   int repeat;
-    char *name;
+    NCURSES_CONST char *name;
   int r_opt = 1;
-    char *input_name = 0;
+    const char *input_name = 0;

   while ((ch = getopt(argc, argv, OPTS_COMMON "abd:e:fi:nqr:sxy")) != -1) {
 switch (ch) {
@@ -891,7 +891,7 @@
    } else if ((name = getenv("TERM")) != 0) {
  brute_force(name);
    } else {
-  static char dumb[] = "dumb";
+  static NCURSES_CONST char dumb[] = "dumb";
  brute_force(dumb);
    }
 }
@@ -918,7 +918,7 @@
    } else if ((name = getenv("TERM")) != 0) {
  demo_terminfo(name);
    } else {
-  static char dumb[] = "dumb";
+  static NCURSES_CONST char dumb[] = "dumb";
  demo_terminfo(dumb);
    }
 }
Index: test/dots.c
Prereq:  1.45
--- ncurses-6.5-20240928+/test/dots.c 2023-01-07 17:21:48.000000000 +0000
+++ ncurses-6.5-20241006/test/dots.c 2024-10-06 21:17:54.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
-
 * Copyright 2019-2022,2023 Thomas E. Dickey                                *
+ * Copyright 2019-2023,2024 Thomas E. Dickey                                *
 * Copyright 1999-2013,2017 Free Software Foundation, Inc.                  *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -30,7 +30,7 @@
/*
 * Author: Thomas E. Dickey <dickey@clark.net> 1999
 *
- * $Id: dots.c,v 1.45 2023/01/07 17:21:48 tom Exp $
+ * $Id: dots.c,v 1.46 2024/10/06 21:17:54 tom Exp $
 *
 * A simple demo of the terminfo interface.
 */
```

```
@@ -61,7 +61,7 @@
}

static bool
-outs(const char *s)
+outs(NCURSES_CONST char *s)
{
   if (VALID_STRING(s)) {
 tputs(s, 1, outc);
Index: test/dots_mvcur.c
Prereq:  1.31
--- ncurses-6.5-20240928+/test/dots_mvcur.c 2023-01-07 17:21:48.000000000 +0000
+++ ncurses-6.5-20241006/test/dots_mvcur.c 2024-10-06
 21:17:54.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2019-2022,2023 Thomas E. Dickey                                *
+ * Copyright 2019-2023,2024 Thomas E. Dickey                                *
 * Copyright 2007-2013,2017 Free Software Foundation, Inc.                  *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -30,7 +30,7 @@
/*
 * Author: Thomas E. Dickey - 2007
 *
- * $Id: dots_mvcur.c,v 1.31 2023/01/07 17:21:48 tom Exp $
+ * $Id: dots_mvcur.c,v 1.32 2024/10/06 21:17:54 tom Exp $
 *
 * A simple demo of the terminfo interface, and mvcur.
 */
@@ -62,7 +62,7 @@
}

static bool
-outs(const char *s)
+outs(NCURSES_CONST char *s)
{
   if (VALID_STRING(s)) {
 tputs(s, 1, outc);
Index: test/dots_termcap.c
Prereq:  1.33
--- ncurses-6.5-20240928+/test/dots_termcap.c 2024-08-31
 15:55:46.000000000 +0000
+++ ncurses-6.5-20241006/test/dots_termcap.c 2024-10-06 21:18:35.000000000 +0000
@@ -30,7 +30,7 @@
/*
 * Author: Thomas E. Dickey
 *
```

```
- * $Id: dots_termcap.c,v 1.33 2024/08/31 15:55:46 tom Exp $
+ * $Id: dots_termcap.c,v 1.35 2024/10/06 21:18:35 tom Exp $
 *
 * A simple demo of the termcap interface.
 */
@@ -113,7 +113,7 @@
}

static bool
-outs(char *s)
+outs(NCURSES_CONST char *s)
{
   if (VALID_STRING(s)) {
 tputs(s, 1, outc);
@@ -178,7 +178,7 @@
get_number(NCURSES_CONST char *cap, const char *env)
{
   int result = tgetnum(cap);
-   char *value = env ? getenv(env) : 0;
+    const char *value = env ? getenv(env) : 0;
   if (value != 0 && *value != 0) {
 char *next = 0;
 long check = strtol(value, &next, 10);
@@ -229,7 +229,7 @@
   double c;
   char buffer[1024];
   char area[1024];
-   char *name;
+    NCURSES_CONST char *name;
   size_t need;
   char *my_env;

Index: test/dup_field.c
Prereq:  1.9
--- ncurses-6.5-20240928+/test/dup_field.c 2024-06-29
 17:45:32.000000000 +0000
+++ ncurses-6.5-20241006/test/dup_field.c 2024-10-06 20:07:19.000000000 +0000
@@ -26,7 +26,7 @@
 * authorization.                                       *
 ****************************************************************************/
/*
- * $Id: dup_field.c,v 1.9 2024/06/29 17:45:32 tom Exp $
+ * $Id: dup_field.c,v 1.11 2024/10/06 20:07:19 tom Exp $
 *
 * Demonstrate dup_field().
 */
@@ -146,27 +146,27 @@
}
```

```
static FieldAttrs *
-my_field_attrs(FIELD *f)
+my_field_attrs(NCURSES_CONST FIELD *f)
{
   return (FieldAttrs *) field_userptr(f);
}

static int
-buffer_length(FIELD *f)
+buffer_length(NCURSES_CONST FIELD *f)
{
   return my_field_attrs(f)->row_lengths[0];
}

static void
-set_buffer_length(FIELD *f, int length)
+set_buffer_length(NCURSES_CONST FIELD *f, int length)
{
   my_field_attrs(f)->row_lengths[0] = length;
}

static int
-offset_in_field(FORM *form)
+offset_in_field(NCURSES_CONST
 FORM *form)
{
-    FIELD *field = current_field(form);
+    NCURSES_CONST FIELD *field = current_field(form);
   int currow, curcol;

   form_getyx(form, currow, curcol);
@@ -245,7 +245,7 @@

 default:
     modified = (ch < MIN_FORM_COMMAND
-   && isprint(ch));
+   && isprint(UChar(ch)));
     break;
 }

Index: test/filter.c
Prereq:  1.38
--- ncurses-6.5-20240928+/test/filter.c 2022-12-04 00:40:11.000000000 +0000
+++ ncurses-6.5-20241006/test/filter.c 2024-10-05 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2019-2020,2022 Thomas E. Dickey                                *
```

```
+ * Copyright 2019-2022,2024 Thomas E. Dickey                          *
 * Copyright 1998-2016,2017 Free Software Foundation, Inc.              *
 *                                                                      *
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@@
 -30,7 +30,7 @@
/*
 * Author:  Thomas E. Dickey 1998
 *
- * $Id: filter.c,v 1.38 2022/12/04 00:40:11 tom Exp $
+ * $Id: filter.c,v 1.39 2024/10/05 19:26:24 tom Exp $
 *
 * An example of the 'filter()' function in ncurses, this program prompts
 * for commands and executes them (like a command shell).  It illustrates
@@ -65,7 +65,7 @@
   if (clocked) {
 if (limit >= 3) {
     time_t now = time((time_t *) 0);
-    struct tm *my = localtime(&now);
+    const struct tm *my = localtime(&now);
     char buffer[80];
     int skip, y, x;
     int margin;
Index: test/form_driver_w.c
Prereq:  1.17
--- ncurses-6.5-20240928+/test/form_driver_w.c 2022-12-10 23:31:31.000000000 +0000
+++ ncurses-6.5-20241006/test/form_driver_w.c 2024-10-06 23:13:40.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2020,2022 Thomas E. Dickey                                     *
+ * Copyright 2020-2022,2024 Thomas E. Dickey
                      *
 * Copyright 2013-2014,2017 Free Software Foundation, Inc.              *
 *                                                                      *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -32,7 +32,7 @@
 ****************************************************************************/

/*
- * $Id: form_driver_w.c,v 1.17 2022/12/10 23:31:31 tom Exp $
+ * $Id: form_driver_w.c,v 1.18 2024/10/06 23:13:40 tom Exp $
 *
 * Test form_driver_w (int, int, wchar_t), a wide char aware
 * replacement of form_driver.
@@ -68,7 +68,7 @@
int
main(int argc, char *argv[])
{
```

```
-    static const char *help[] =
+    static NCURSES_CONST char *help[] =
     {
 "Commands:",
 "  ^D,^Q,ESC           - quit program",
Index: test/gdc.c
Prereq:  1.60
--- ncurses-6.5-20240928+/test/gdc.c 2024-06-29 19:59:06.000000000 +0000
+++ ncurses-6.5-20241006/test/gdc.c 2024-10-06 20:08:59.000000000 +0000
@@ -34,7 +34,7 @@
 * modified 10-18-89
 for curses (jrl)
 * 10-18-89 added signal handling
 *
- * $Id: gdc.c,v 1.60 2024/06/29 19:59:06 tom Exp $
+ * $Id: gdc.c,v 1.62 2024/10/06 20:08:59 tom Exp $
 */

#include <test.priv.h>
@@ -181,7 +181,7 @@
    int check;
    time_t result;
    char c = 0;
-    struct tm *tm;
+    NCURSES_CONST struct tm *tm;

    switch (sscanf(value, "%d:%d:%d%c", &hh, &mm, &ss, &c)) {
    default:
@@ -243,7 +243,7 @@
main(int argc, char *argv[])
{
    time_t now;
-    struct tm *tm;
+    NCURSES_CONST struct tm *tm;
    long t, a;
    int i, j, s, k, ch;
    int count = 0;
@@ -293,7 +293,7 @@

    InitAndCatch({
 if (redirected) {
-     char *name = getenv("TERM");
+     NCURSES_CONST char *name = getenv("TERM");
     if (name == 0
  || newterm(name, ofp, ifp) == 0) {
  fprintf(stderr, "cannot open terminal\n");
@@ -431,7 +431,7 @@
     _nc_STRNCPY(buf, ctime(&now), (size_t) 30);
```

```
    {
  char *d2 = buf + 10;
-  char *s2 = buf + 19;
+  NCURSES_CONST char *s2 = buf + 19;
   while ((*d2++ = *s2++) != '\0') ;
    }
    MvAddStr(16, 30, buf);
Index: test/inch_wide.c
Prereq:  1.13
--- ncurses-6.5-20240928+/test/inch_wide.c 2022-12-10 23:55:34.000000000 +0000
+++ ncurses-6.5-20241006/test/inch_wide.c 2024-10-06 23:14:31.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2019-2020,2022 Thomas E. Dickey                                *
+ * Copyright 2019-2022,2024 Thomas E. Dickey                                *
 * Copyright 2007-2010,2017 Free Software Foundation, Inc.                  *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                           *
 ****************************************************************************/
/*
- * $Id: inch_wide.c,v 1.13 2022/12/10 23:55:34 tom Exp $
+
 * $Id: inch_wide.c,v 1.14 2024/10/06 23:14:31 tom Exp $
 */
/*
      int in_wch(cchar_t *wcval);
@@ -61,7 +61,7 @@
static int
test_inchs(int level, char **argv, WINDOW *chrwin, WINDOW *strwin)
{
-    static const char *help[] =
+    static NCURSES_CONST char *help[] =
   {
 "Test input from screen using inch(), etc., in a moveable viewport.",
 "",
Index: test/inchs.c
Prereq:  1.19
--- ncurses-6.5-20240928+/test/inchs.c 2022-12-11 00:01:39.000000000 +0000
+++ ncurses-6.5-20241006/test/inchs.c 2024-10-06 21:17:54.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2019-2020,2022 Thomas E. Dickey                                *
+ * Copyright 2019-2022,2024 Thomas E. Dickey                                *
 * Copyright 2007-2012,2017 Free Software Foundation, Inc.                  *
 *                                                                          *
 * Permission is hereby granted, free of
```

```
 charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                           *
 ****************************************************************************/
/*
- * $Id: inchs.c,v 1.19 2022/12/11 00:01:39 tom Exp $
+ * $Id: inchs.c,v 1.20 2024/10/06 21:17:54 tom Exp $
 *
 * Author: Thomas E Dickey
 */
@@ -71,7 +71,7 @@
static int
test_inchs(int level, char **argv, WINDOW *chrwin, WINDOW *strwin)
{
-    static const char *help[] =
+    static NCURSES_CONST char *help[] =
    {
 "Test input from screen using inch(), etc., in a moveable viewport.",
 "",
Index: test/ins_wide.c
Prereq:  1.30
--- ncurses-6.5-20240928+/test/ins_wide.c 2022-12-10 22:28:50.000000000 +0000
+++ ncurses-6.5-20241006/test/ins_wide.c 2024-10-05 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2020,2022 Thomas E. Dickey                                     *
+ * Copyright
 2020-2022,2024 Thomas E. Dickey                                *
 * Copyright 2002-2016,2017 Free Software Foundation, Inc.                  *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                           *
 ****************************************************************************/
/*
- * $Id: ins_wide.c,v 1.30 2022/12/10 22:28:50 tom Exp $
+ * $Id: ins_wide.c,v 1.31 2024/10/05 19:26:24 tom Exp $
 *
 * Demonstrate the wins_wstr() and wins_wch functions.
 * Thomas Dickey - 2002/11/23
@@ -73,7 +73,7 @@
static int n_opt = -1;

static void
-legend(WINDOW *win, int level, Options state, wchar_t *buffer, int length)
+legend(WINDOW *win, int level, Options state, const wchar_t *buffer, int length)
{
    const char *showstate;
```

```
Index: test/insdelln.c
Prereq:  1.15
--- ncurses-6.5-20240928+/test/insdelln.c 2022-12-10
 23:31:31.000000000 +0000
+++ ncurses-6.5-20241006/test/insdelln.c 2024-10-06 21:08:52.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2019-2020,2022 Thomas E. Dickey                                *
+ * Copyright 2019-2022,2024 Thomas E. Dickey                                *
 * Copyright 2008-2014,2017 Free Software Foundation, Inc.                  *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                           *
 ****************************************************************************/
/*
- * $Id: insdelln.c,v 1.15 2022/12/10 23:31:31 tom Exp $
+ * $Id: insdelln.c,v 1.17 2024/10/06 21:08:52 tom Exp $
 *
 * test-driver for deleteln, wdeleteln, insdelln, winsdelln, insertln, winsertln
  */
@@ -160,7 +160,7 @@
}

static void
-do_subwindow(WINDOW *win, STATUS * sp, void func(WINDOW *))
+do_subwindow(WINDOW *win, const STATUS * sp, void func(WINDOW *))
{
   WINDOW *win1 = newwin(sp->y_max - 2, sp->x_max - 2,
    sp->y_beg + 1, sp->x_beg + 1);
@@ -204,7 +204,7 @@
static void
show_help(WINDOW *win)
{
-    static const char *table[] =
+    static NCURSES_CONST char *table[] =
   {
 "Basic commands:"
 ,"Use h/j/k/l or arrow keys to move the cursor."
Index: test/inserts.c
Prereq:  1.34
--- ncurses-6.5-20240928+/test/inserts.c 2022-12-10 22:28:50.000000000 +0000
+++ ncurses-6.5-20241006/test/inserts.c 2024-10-05 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2020,2022 Thomas E. Dickey                                     *
+ * Copyright 2020-2022,2024 Thomas E. Dickey                                *
```

```
 * Copyright 2002-2016,2017 Free Software Foundation, Inc.
      *
 *                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                           *
 ****************************************************************************/
/*
- * $Id: inserts.c,v 1.34 2022/12/10 22:28:50 tom Exp $
+ * $Id: inserts.c,v 1.35 2024/10/05 19:26:24 tom Exp $
 *
 * Demonstrate the winsstr() and winsch functions.
 * Thomas Dickey - 2002/10/19
@@ -98,7 +98,7 @@
}

static int
-ColOf(char *buffer, int length, int margin)
+ColOf(const char *buffer, int length, int margin)
{
   int n;
   int result;
Index: test/knight.c
Prereq:  1.52
--- ncurses-6.5-20240928+/test/knight.c 2022-12-04 00:40:11.000000000 +0000
+++ ncurses-6.5-20241006/test/knight.c 2024-10-05 19:38:58.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright
 2018-2021,2022 Thomas E. Dickey                          *
+ * Copyright 2018-2022,2024 Thomas E. Dickey                          *
 * Copyright 1998-2013,2017 Free Software Foundation, Inc.              *
 *                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -34,7 +34,7 @@
 * Eric S. Raymond <esr@snark.thyrsus.com> July 22 1995.  Mouse support
 * added September 20th 1995.
 *
- * $Id: knight.c,v 1.52 2022/12/04 00:40:11 tom Exp $
+ * $Id: knight.c,v 1.53 2024/10/05 19:38:58 tom Exp $
 */

#include <test.priv.h>
@@ -450,7 +450,8 @@
}

static bool
-evaluate_move(SQUARES squares, HISTORY * doneData, int doneSize, int row, int column)
```

```
+evaluate_move(SQUARES squares, const HISTORY * doneData, int doneSize,
+       int row, int column)
{
   if (doneSize <= 1)
 return (TRUE);
Index: test/list_keys.c
Prereq:  1.33
--- ncurses-6.5-20240928+/test/list_keys.c 2023-11-11
 00:35:05.000000000 +0000
+++ ncurses-6.5-20241006/test/list_keys.c 2024-10-05 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2018-2022,2023 Thomas E. Dickey                                *
+ * Copyright 2018-2023,2024 Thomas E. Dickey                                *
 * Copyright 2016,2017 Free Software Foundation, Inc.                       *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                           *
 ****************************************************************************/
/*
- * $Id: list_keys.c,v 1.33 2023/11/11 00:35:05 tom Exp $
+ * $Id: list_keys.c,v 1.34 2024/10/05 19:26:24 tom Exp $
 *
 * Author: Thomas E Dickey
 *
@@ -297,7 +297,7 @@
#if NCURSES_XNAMES
   if (x_opt) {
  for (k = 0; k < count; ++k) {
-     TERMTYPE *term;
+     const TERMTYPE *term;
     set_curterm(terms[k]);
     term = (TERMTYPE *) cur_term;
     total += (size_t) (NUM_STRINGS(term) - STRCOUNT);
@@ -348,7 +348,7 @@
 widths1 = (int) strlen(modifier);

   for (k = 0; k < count; ++k) {
- char *value;
+ const char *value;
 set_curterm(terms[k]);
 if ((value = termname()) == NULL)
     failed("termname");
Index: test/move_field.c
Prereq:  1.16
--- ncurses-6.5-20240928+/test/move_field.c 2024-06-29 17:45:02.000000000 +0000
+++ ncurses-6.5-20241006/test/move_field.c 2024-10-06 21:12:35.000000000 +0000
```

```
@@ -26,7 +26,7 @@
 * authorization.                                        *
 ****************************************************************************/
/*
- * $Id: move_field.c,v 1.16 2024/06/29 17:45:02 tom Exp $
+ * $Id: move_field.c,v 1.19 2024/10/06 21:12:35 tom Exp $
 *
 * Demonstrate move_field().
 */
@@ -146,27 +146,27 @@
}

static FieldAttrs
 *
-my_field_attrs(FIELD *f)
+my_field_attrs(NCURSES_CONST FIELD *f)
{
   return (FieldAttrs *) field_userptr(f);
}

static int
-buffer_length(FIELD *f)
+buffer_length(NCURSES_CONST FIELD *f)
{
   return my_field_attrs(f)->row_lengths[0];
}

static void
-set_buffer_length(FIELD *f, int length)
+set_buffer_length(NCURSES_CONST FIELD *f, int length)
{
   my_field_attrs(f)->row_lengths[0] = length;
}

static int
-offset_in_field(FORM *form)
+offset_in_field(NCURSES_CONST FORM *form)
{
-    FIELD *field = current_field(form);
+    NCURSES_CONST FIELD *field = current_field(form);
   int currow, curcol;

   form_getyx(form, currow, curcol);
@@ -245,7 +245,7 @@

 default:
     modified = (ch < MIN_FORM_COMMAND
-   && isprint(ch));
```

```
+   && isprint(UChar(ch)));
    break;
 }

@@ -275,9 +275,9 @@

/* display a status message to show what's happening */
static void
-show_status(FORM *form, FIELD *field)
+show_status(NCURSES_CONST FORM *form, NCURSES_CONST FIELD
 *field)
{
-    WINDOW *sub = form_sub(form);
+    NCURSES_CONST WINDOW *sub = form_sub(form);
    int currow, curcol;

    getyx(stdscr, currow, curcol);
Index: test/movewindow.c
Prereq:  1.54
--- ncurses-6.5-20240928+/test/movewindow.c 2023-05-27 20:13:10.000000000 +0000
+++ ncurses-6.5-20241006/test/movewindow.c 2024-10-06 18:44:26.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2018-2022,2023 Thomas E. Dickey                                *
+ * Copyright 2018-2023,2024 Thomas E. Dickey                                *
 * Copyright 2006-2013,2017 Free Software Foundation, Inc.                  *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                           *
 ****************************************************************************/
 /*
- * $Id: movewindow.c,v 1.54 2023/05/27 20:13:10 tom Exp $
+ * $Id: movewindow.c,v 1.56 2024/10/06 18:44:26 tom Exp $
 *
 * Demonstrate move functions for windows and derived windows from the curses
 * library.
@@ -135,7 +135,7 @@
 */
static PAIR *
selectcell(WINDOW *parent,
-    WINDOW *child,
+    NCURSES_CONST WINDOW *child,
    int uli, int ulj,
    int lri, int lrj,
    bool relative,
@@ -252,7 +252,7 @@
    int max_col = (parent == stdscr) ? COL_MAX : getmaxx(parent);
```

```
   int min_line = (parent == stdscr) ? LINE_MIN : 0;
   int max_line = (parent == stdscr) ? LINE_MAX : getmaxy(parent);
-    PAIR *tmp;
+    NCURSES_CONST PAIR *tmp;
    bool result = FALSE;

    head_line("Use arrows to move cursor, anything else to mark corner 1");
@@ -346,7 +346,7 @@
}

static WINDOW *
-parent_of(WINDOW *win)
+parent_of(NCURSES_CONST WINDOW *win)
{
    WINDOW *result = 0;
    int n = window2num(win);
@@ -435,7 +435,7 @@
 int max_col = top ? COL_MAX
 : getmaxx(parent);
 int min_line = top ? LINE_MIN : 0;
 int max_line = top ? LINE_MAX : getmaxy(parent);
- PAIR *tmp;
+ NCURSES_CONST PAIR *tmp;
 bool more;

 head_line("Select new position for %swindow", top ? "" : "sub");
@@ -474,7 +474,7 @@
}

static void
-show_derwin(WINDOW *win)
+show_derwin(NCURSES_CONST WINDOW *win)
{
    int pary, parx, maxy, maxx;

@@ -500,7 +500,7 @@
 int max_col = top ? COL_MAX : getmaxx(parent);
 int min_line = top ? LINE_MIN : 0;
 int max_line = top ? LINE_MAX : getmaxy(parent);
- PAIR *tmp;
+ NCURSES_CONST PAIR *tmp;
 bool more;

 show_derwin(win);
Index: test/ncurses.c
Prereq:  1.538
--- ncurses-6.5-20240928+/test/ncurses.c 2023-11-11 01:23:59.000000000 +0000
+++ ncurses-6.5-20241006/test/ncurses.c 2024-10-06 20:18:59.000000000 +0000
```

```
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2018-2022,2023 Thomas E. Dickey                                *
+ * Copyright 2018-2023,2024
 Thomas E. Dickey                                *
 * Copyright 1998-2016,2017 Free Software Foundation, Inc.                   *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -41,7 +41,7 @@
   Author: Eric S. Raymond <esr@snark.thyrsus.com> 1993
         Thomas E. Dickey (beginning revision 1.27 in 1996).

-$Id: ncurses.c,v 1.538 2023/11/11 01:23:59 tom Exp $
+$Id: ncurses.c,v 1.541 2024/10/06 20:18:59 tom Exp $

****************************************************************************/

@@ -273,7 +273,7 @@
     ++x;
     break;
 default:
-    if (!isprint(ch) || ch >= KEY_MIN) {
+    if (!isprint(UChar(ch)) || ch >= KEY_MIN) {
  beep();
     } else if ((int) strlen(buffer) < limit) {
  int j;
@@ -928,7 +928,7 @@
  /* at least Solaris SVR4 curses breaks unctrl(128), etc. */
  c2 &= 0x7f;
#endif
-  if (isprint(c))
+  if (isprint(UChar(c)))
      (void)
 wprintw(win, "%c", UChar(c));
  else if (c2 != UChar(c))
     (void) wprintw(win, "M-%s", unctrl(c2));
@@ -1693,7 +1693,7 @@
     chtype extras = (chtype) ac;

     if (UseColors) {
-  NCURSES_PAIRS_T pair = 0;
+  NCURSES_PAIRS_T pair;
  if ((fg != COLOR_BLACK) || (bg != COLOR_BLACK)) {
      pair = 1;
      if (init_pair(pair, fg, bg) == ERR) {
@@ -2345,7 +2345,6 @@
 for (i = (NCURSES_PAIRS_T) (base_row * per_row); i < pairs_max; i++) {
     int row = grid_top + (i / per_row) - base_row;
```

```
    int col = (i % per_row + 1) * width;
-    NCURSES_PAIRS_T pair = i;

    if ((i / per_row) > row_limit)
  break;
@@ -2355,6 +2354,7 @@
    if (row >= 0 && move(row, col) != ERR) {
  NCURSES_COLOR_T fg = (NCURSES_COLOR_T) InxToFG(i);
  NCURSES_COLOR_T bg = (NCURSES_COLOR_T) InxToBG(i);
+  NCURSES_PAIRS_T pair = i;

  init_pair(pair, fg, bg);
  attron(COLOR_PAIR(pair));
@@ -2517,7 +2517,7 @@
static int
x_color_test(bool recur GCC_UNUSED)
{
-    long i;
+    int i;

 int top = 0, width;
    int base_row = 0;
    int grid_top = top + 3;
@@ -2613,17 +2613,17 @@
 /* show color names/numbers across the top */
 for (i = 0; i < per_row; i++) {
    show_color_name(top + 2,
-       ((int) i + 1) * width,
-       (int) i * zoom_size + MinColors,
+       (i + 1) * width,
+       i * zoom_size + MinColors,
       opt_wide,
       opt_zoom);
 }

 /* show a grid of colors, with color names/ numbers on the left */
 for (i = (base_row * per_row); i < pairs_max; i++) {
-    int row = grid_top + ((int) i / per_row) - base_row;
-    int col = ((int) i % per_row + 1) * width;
-    int pair = (int) i;
+    int row = grid_top + (i / per_row) - base_row;
+    int col = (i % per_row + 1) * width;
+    int pair = i;

    if ((i / per_row) > row_limit)
  break;
@@ -2828,7 +2828,7 @@
#define DecodeRGB(n) (NCURSES_COLOR_T) ((n * 1000) / 0xffff)
```

```
static void
-init_all_colors(bool xterm_colors, char *palette_file)
+init_all_colors(bool xterm_colors, NCURSES_CONST
 char *palette_file)
{
   NCURSES_PAIRS_T cp;
   all_colors = typeMalloc(RGB_DATA, (unsigned) MaxColors);
@@ -3317,7 +3317,7 @@
{
   int c, fmt = 1;
   char buf[9];
-   char *s;
+    NCURSES_CONST char *s;
   attr_t attr = A_NORMAL;
   unsigned at_code = 0;
#if HAVE_SLK_COLOR
@@ -3938,8 +3938,7 @@

   *dst = *src;
   do {
- int count;
- TEST_CCHAR(src, count, {
+ TEST_CCHAR(src, {
     attr |= (test_attrs & A_ALTCHARSET);
     setcchar(dst, test_wch, attr, pair, NULL);
 }, {
@@ -4810,7 +4809,8 @@
/* Ask user for a window definition */
{
   WINDOW *rwindow;
-   pair ul, lr, *tmp;
+    pair ul, lr;
+    NCURSES_CONST pair *tmp;

   move(0, 0);
   clrtoeol();
@@ -5014,7 +5014,8 @@
#if HAVE_WRESIZE
 case CTRL('X'): /* resize window */
    if (current) {
-  pair *tmp, ul, lr;
+  NCURSES_CONST pair *tmp;
+  pair ul, lr;
  int mx, my;

  move(0, 0);
@@ -5249,7 +5250,7 @@
```

```
}

static void
-fill_panel(PANEL *pan)
+fill_panel(NCURSES_CONST PANEL
 *pan)
{
   WINDOW *win = panel_window(pan);
   const char *userptr = (const char *) panel_userptr(pan);
@@ -5286,7 +5287,7 @@
}

static void
-fill_wide_panel(PANEL *pan)
+fill_wide_panel(NCURSES_CONST PANEL *pan)
{
   WINDOW *win = panel_window(pan);
   const char *userptr = (const char *) panel_userptr(pan);
@@ -5336,7 +5337,7 @@
}

static int
-demo_panels(void (*InitPanel) (WINDOW *), void (*FillPanel) (PANEL *))
+demo_panels(void (*InitPanel) (WINDOW *), void (*FillPanel) (NCURSES_CONST PANEL *))
{
   int count;
   int itmp;
@@ -6246,7 +6247,8 @@
run_trace_menu(MENU * m)
{
   ITEM **items;
-   ITEM *i, **p;
+    NCURSES_CONST ITEM *i;
+    ITEM **p;

   for (;;) {
 bool changed = FALSE;
@@ -6424,7 +6426,7 @@

   if (field_info(me, &rows, &cols, &frow, &fcol, &nrow, &nbuf) == E_OK
 && nbuf > 0) {
- char *source = field_buffer(me, 1);
+ NCURSES_CONST char *source = field_buffer(me, 1);
 size_t have = (source ? strlen(source) : 0) + 1;
 size_t need
 = 80 + have;
 char *temp = malloc(need);
@@ -6434,7 +6436,7 @@
```

```
     _nc_STRNCPY(temp, source ? source : "", have + 1);
     len = (size_t) (char *) field_userptr(me);
     if (c <= KEY_MAX) {
-  if (isgraph(c) && (len + 1) < sizeof(temp)) {
+  if (isgraph(UChar(c)) && (len + 1) < sizeof(temp)) {
      temp[len++] = (char) c;
      temp[len] = 0;
      set_field_buffer(me, 1, temp);
@@ -6484,7 +6486,7 @@
 }

 static int
-form_virtualize(FORM *f, WINDOW *w)
+form_virtualize(NCURSES_CONST FORM *f, WINDOW *w)
 {
    /* *INDENT-OFF* */
    static const struct {
@@ -6658,7 +6660,7 @@
 static
 FIELDCHECK_CB(pw_field_check)
 {
-    char *s = field_buffer(fld, 0);
+    NCURSES_CONST char *s = field_buffer(fld, 0);
    int n;

    for (n = 0; s[n] != '\0'; ++n) {
@@ -6680,7 +6682,8 @@
 form_test(bool recur GCC_UNUSED)
 {
    FORM *form;
-    FIELD *f[12], *secure;
+    FIELD *f[12];
+    NCURSES_CONST FIELD *secure;
    FIELDTYPE *fty_middle = new_fieldtype(mi_field_check, mi_char_check);
     FIELDTYPE *fty_passwd = new_fieldtype(pw_field_check, pw_char_check);
    int c;
@@ -7176,7 +7179,7 @@
 }

 static void
-overlap_test_4(int flavor, WINDOW *a, WINDOW *b)
+overlap_test_4(int flavor, NCURSES_CONST WINDOW *a, WINDOW *b)
 {
    switch ((otCOPY) flavor) {
    case otCOPY_overwrite:
@@ -7899,7 +7902,7 @@
    bool monochrome = FALSE;
 #if HAVE_COLOR_CONTENT
```

```
   bool xterm_colors = FALSE;
-    char *palette_file = 0;
+    NCURSES_CONST char *palette_file = 0;
#endif

   setlocale(LC_ALL, "");
Index: test/padview.c
Prereq:  1.22
--- ncurses-6.5-20240928+/test/padview.c 2022-12-04 00:40:11.000000000 +0000
+++ ncurses-6.5-20241006/test/padview.c 2024-10-06 21:08:25.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2019-2021,2022 Thomas E. Dickey                                *
+ * Copyright 2019-2022,2024 Thomas E. Dickey                                *
 * Copyright 2017 Free
 Software Foundation, Inc.                          *
 *                                                          *
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@@ -29,7 +29,7 @@
/*
 * clone of view.c, using pads
 *
- * $Id: padview.c,v 1.22 2022/12/04 00:40:11 tom Exp $
+ * $Id: padview.c,v 1.24 2024/10/06 21:08:25 tom Exp $
 */

#include <test.priv.h>
@@ -182,7 +182,7 @@

#if USE_WIDEC_SUPPORT
   if (!memcmp("\357\273\277", my_blob, 3)) {
- char *s = my_blob + 3;
+ const char *s = my_blob + 3;
 char *d = my_blob;
 Trace(("trim BOM"));
 do {
@@ -213,7 +213,7 @@
   for (k = 0; my_vec[k]; ++k) {
 char *s;
#if USE_WIDEC_SUPPORT
- char *last = my_vec[k] + (int) strlen(my_vec[k]);
+ const char *last = my_vec[k] + (int) strlen(my_vec[k]);
 wchar_t wch[2];
 size_t rc;
#ifndef state_unused
@@ -279,7 +279,7 @@
int
main(int argc, char *argv[])
```

```
{
-    static const char *help[] =
+    static NCURSES_CONST char *help[] =

    {
 "Commands:",
 "  q,^Q,ESC       - quit this program",
@@ -532,7 +532,7 @@
     beep();
     break;
 }
- if (c >= KEY_MIN || (c > 0 && !isdigit(c))) {
+ if (c >= KEY_MIN || (c > 0 && !isdigit(UChar(c)))) {
     got_number = FALSE;
     value = 0;
 }
Index: test/parse_rgb.h
Prereq:  1.5
--- ncurses-6.5-20240928+/test/parse_rgb.h 2020-02-02 23:34:34.000000000 +0000
+++ ncurses-6.5-20241006/test/parse_rgb.h 2024-10-05 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2018,2020 Thomas E. Dickey                                     *
+ * Copyright 2018-2020,2024 Thomas E. Dickey                                *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
 * copy of this software and associated documentation files (the            *
@@ -26,7 +26,7 @@
 * authorization.                                                           *
 ****************************************************************************/
/*
- * $Id: parse_rgb.h,v 1.5 2020/02/02 23:34:34 tom Exp $
+ * $Id: parse_rgb.h,v 1.6 2024/10/05 19:26:24 tom Exp $
 *
 * Sample implementation of ncurses RGB extension from user_caps(5).
 */
@@ -49,7 +49,7 @@
 int bits;
 int pwr2;
 int r = 0, g = 0, b = 0;
- char *data;
+ const char *data;
 char ch;

 for (max_bits = 0, pwr2 = 1;
Index: test/picsmap.c
Prereq:  1.149
```

```
--- ncurses-6.5-20240928+/test/picsmap.c 2023-04-23 23:20:37.000000000 +0000
+++ ncurses-6.5-20241006/test/picsmap.c 2024-10-05 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2018-2022,2023 Thomas E. Dickey                                *
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 * Copyright 2017,2018 Free Software Foundation, Inc.                       *
 *                                                                          *
                                                *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                           *
 ****************************************************************************/
/*
- * $Id: picsmap.c,v 1.149 2023/04/23 23:20:37 tom Exp $
+ * $Id: picsmap.c,v 1.150 2024/10/05 19:26:24 tom Exp $
 *
 * Author: Thomas E. Dickey
 *
@@ -574,7 +574,7 @@
    _nc_STRCAT(full_name, filename, need);
    if (tries & 4) {
  char *t = s;
-  char *tc;
+  const char *tc;
  int num;
  char chr;
  int found = 0;
@@ -1374,8 +1374,8 @@
  int r, g, b, nocolor;
  float rf, gf, bf;
  unsigned check;
-  char *t;
-  char *s = t = strchr(buffer, '#');
+  char *s = strchr(buffer, '#');
+  const char *t = s;
  bool matched = FALSE;

  if (s != 0) {
@@ -1492,7 +1492,7 @@
#define fg_color(pics,n) (pics->fgcol[n].fgcol)

static void
-dump_picture(PICS_HEAD
- * pics)
+dump_picture(const PICS_HEAD * pics)
{
   int y, x;
```

```
@@ -1767,7 +1767,7 @@
#if USE_EXTENDED_COLORS
 case 'x':
     {
-  char *s = optarg;
+  const char *s = optarg;
   while (*s) {
      switch (*s++) {
      case 'p':
Index: test/popup_msg.c
Prereq:  1.12
--- ncurses-6.5-20240928+/test/popup_msg.c 2024-06-29 18:34:58.000000000 +0000
+++ ncurses-6.5-20241006/test/popup_msg.c 2024-10-06 21:07:01.000000000 +0000
@@ -27,7 +27,7 @@
 * authorization.                                        *
 ****************************************************************************/
/*
- * $Id: popup_msg.c,v 1.12 2024/06/29 18:34:58 tom Exp $
+ * $Id: popup_msg.c,v 1.13 2024/10/06 21:07:01 tom Exp $
 *
 * Show a multi-line message in a window which may extend beyond the screen.
 *
@@ -62,7 +62,7 @@
 * Display a temporary window, e.g., to display a help-message.
 */
void
-popup_msg(WINDOW *parent, const char *const *msg)
+popup_msg(WINDOW *parent, NCURSES_CONST
 char *const *msg)
{
    int x0 = 4;
    int y0 = 2;
@@ -171,12 +171,12 @@
void
popup_msg2(WINDOW *parent, char **msg)
{
-    popup_msg(parent, (const char *const *) msg);
+    popup_msg(parent, (NCURSES_CONST char *const *) msg);
}

#else
void
-popup_msg(WINDOW *parent, const char *const *msg)
+popup_msg(WINDOW *parent, NCURSES_CONST char *const *msg)
{
    (void) parent;
    (void) msg;
```

```
Index: test/popup_msg.h
Prereq:  1.5
--- ncurses-6.5-20240928+/test/popup_msg.h 2020-02-02 23:34:34.000000000 +0000
+++ ncurses-6.5-20241006/test/popup_msg.h 2024-10-06 21:17:54.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2018,2020 Thomas E. Dickey                                     *
+ * Copyright 2018-2020,2024 Thomas E. Dickey                                *
 * Copyright 2017 Free Software Foundation, Inc.                            *
 *                                                                          *
                *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                           *
 ****************************************************************************/
/*
- * $Id: popup_msg.h,v 1.5 2020/02/02 23:34:34 tom Exp $
+ * $Id: popup_msg.h,v 1.6 2024/10/06 21:17:54 tom Exp $
 *
 * Utility functions for a popup-message or help-screen.
 */
@@ -37,7 +37,7 @@

#include <test.priv.h>

-extern void popup_msg(WINDOW *parent, const char *const *msg);
+extern void popup_msg(WINDOW *parent, NCURSES_CONST char *const *msg);
extern void popup_msg2(WINDOW *parent, char **msg);

#endif /* POPUP_MSG_H_incl */
Index: test/railroad.c
Prereq:  1.26
--- ncurses-6.5-20240928+/test/railroad.c 2022-12-11 00:12:13.000000000 +0000
+++ ncurses-6.5-20241006/test/railroad.c 2024-10-05 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
-
 * Copyright 2019-2020,2022 Thomas E. Dickey                                *
+ * Copyright 2019-2022,2024 Thomas E. Dickey                                *
 * Copyright 2000-2013,2017 Free Software Foundation, Inc.                  *
 *                                                 *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -30,7 +30,7 @@
/*
 * Author: Thomas E. Dickey - 2000
 *
- * $Id: railroad.c,v 1.26 2022/12/11 00:12:13 tom Exp $
+ * $Id: railroad.c,v 1.27 2024/10/05 19:26:24 tom Exp $
```

```
 *
 * A simple demo of the termcap interface.
 */
@@ -113,7 +113,7 @@
static void
ShowSign(char *string)
{
-    char *base = string;
+    const char *base = string;
    int first, last;

    if (moveit != 0) {
Index: test/rain.c
Prereq:  1.58
--- ncurses-6.5-20240928+/test/rain.c 2024-08-31 15:56:10.000000000 +0000
+++ ncurses-6.5-20241006/test/rain.c 2024-10-06 21:09:00.000000000 +0000
@@ -27,7 +27,7
 @@
 * authorization.                                        *
 ********************************************************************************/
/*
- * $Id: rain.c,v 1.58 2024/08/31 15:56:10 tom Exp $
+ * $Id: rain.c,v 1.62 2024/10/06 21:09:00 tom Exp $
 */
#include <test.priv.h>
#include <popup_msg.h>
@@ -45,7 +45,7 @@

struct DATA;

-typedef void (*DrawPart) (struct DATA *);
+typedef void (*DrawPart) (const struct DATA *);

typedef struct DATA {
    int y, x;
@@ -118,25 +118,25 @@
}

static void
-part1(DATA * drop)
+part1(const DATA * drop)
{
    MvAddCh(drop->y, drop->x, '.');
}

static void
-part2(DATA * drop)
+part2(const DATA * drop)
```

```
{
   MvAddCh(drop->y, drop->x, 'o');
}

static void
-part3(DATA * drop)
+part3(const DATA * drop)
{
   MvAddCh(drop->y, drop->x, 'O');
}

static void
-part4(DATA * drop)
+part4(const DATA * drop)
{
   MvAddCh(drop->y - 1, drop->x, '-');
   MvAddStr(drop->y, drop->x - 1, "|.|");
@@ -144,7 +144,7 @@
 }

static void
-part5(DATA * drop)
+part5(const DATA * drop)
{
   MvAddCh(drop->y - 2, drop->x, '-');
   MvAddStr(drop->y - 1, drop->x - 1, "/ \\");
@@ -154,7 +154,7 @@
}

static void
-part6(DATA * drop)
+part6(const DATA * drop)
{
   MvAddCh(drop->y - 2, drop->x, ' ');
   MvAddStr(drop->y - 1, drop->x - 1, "   ");
@@ -186,7 +186,7 @@
}

static void
-draw_part(void (*func) (DATA *), int state, DATA * data)
+draw_part(void (*func) (const DATA *), int state, DATA * data)
{
   data->func = func;
   data->state = state;
@@ -328,7 +328,7 @@
int
main(int argc, char *argv[])
{
```

```
-    static const char *help[] =
+    static NCURSES_CONST char *help[] =
     {
 "Commands:",
 " q/Q        exit the program",
Index: test/redraw.c
Prereq:  1.17
--- ncurses-6.5-20240928+/test/redraw.c 2022-12-10 22:28:50.000000000 +0000
+++ ncurses-6.5-20241006/test/redraw.c 2024-10-06 21:17:54.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
-
 * Copyright 2020-2021,2022 Thomas E. Dickey                                *
+ * Copyright 2020-2022,2024 Thomas E. Dickey                                *
 * Copyright 2006-2012,2017 Free Software Foundation, Inc.                  *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                           *
 ****************************************************************************/
/*
- * $Id: redraw.c,v 1.17 2022/12/10 22:28:50 tom Exp $
+ * $Id: redraw.c,v 1.18 2024/10/06 21:17:54 tom Exp $
 *
 * Demonstrate the redrawwin() and wredrawln() functions.
 * Thomas Dickey - 2006/11/4
@@ -61,7 +61,7 @@
static void
test_redraw(WINDOW *win)
{
-    static const char *help[] =
+    static NCURSES_CONST char *help[] =
     {
 "Commands:",
 "  ^Q/ESC/q   - quit",
Index: test/savescreen.c
Prereq:
  1.62
--- ncurses-6.5-20240928+/test/savescreen.c 2022-12-10 23:23:27.000000000 +0000
+++ ncurses-6.5-20241006/test/savescreen.c 2024-10-06 21:10:09.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2018-2021,2022 Thomas E. Dickey                                *
+ * Copyright 2018-2022,2024 Thomas E. Dickey                                *
 * Copyright 2006-2017,2018 Free Software Foundation, Inc.                  *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
```

```
 * authorization.                                          *
 ****************************************************************************/
/*
- * $Id: savescreen.c,v 1.62 2022/12/10 23:23:27 tom Exp $
+ * $Id: savescreen.c,v 1.65 2024/10/06 21:10:09 tom Exp $
 *
 * Demonstrate save/restore functions
 from the curses library.
 * Thomas Dickey - 2007/7/14
@@ -96,7 +96,7 @@
}

static int
-load_screen(char *filename)
+load_screen(NCURSES_CONST char *filename)
{
   int result;

@@ -170,7 +170,7 @@
#if USE_WIDEC_SUPPORT
   cchar_t mycc;
#endif
-   char *filename = files[which];
+    NCURSES_CONST char *filename = files[which];
   bool dumped = FALSE;

   if (filename != 0) {
@@ -216,7 +216,7 @@
static void
editor_help(void)
{
-   static const char *msgs[] =
+    static NCURSES_CONST char *msgs[] =
   {
 "You are now in the screen-editor, which allows you to make some",
 "lines on the screen, as well as save copies of the screen to a",
@@ -238,7 +238,7 @@
static void
replay_help(void)
{
-   static const char *msgs[] =
+    static NCURSES_CONST char *msgs[] =
   {
 "You are now in the screen-loader, which allows you to view",
 "the dumped/restored screens.",
@@ -286,7 +286,7 @@
   bool replaying = FALSE;
   bool done = FALSE;
```

```
   char **files;
-
   char *fill_by = 0;
+    NCURSES_CONST char *fill_by = 0;
#if USE_WIDEC_SUPPORT
   cchar_t mycc;
   static const wchar_t mywc[2] =
Index: test/tclock.c
Prereq:  1.48
--- ncurses-6.5-20240928+/test/tclock.c 2023-02-25 16:42:22.000000000 +0000
+++ ncurses-6.5-20241006/test/tclock.c 2024-10-05 18:47:56.000000000 +0000
@@ -1,4 +1,4 @@
-/* $Id: tclock.c,v 1.48 2023/02/25 16:42:22 tom Exp $ */
+/* $Id: tclock.c,v 1.49 2024/10/05 18:47:56 tom Exp $ */

#define NEED_TIME_H
#include <test.priv.h>
@@ -145,7 +145,7 @@
   int lastbeep = -1;
   bool odd = FALSE;
   time_t tim;
-   struct tm *t;
+    const struct tm *t;
   char szChar[20];
   char *text;
   short my_bg = COLOR_BLACK;
Index: test/test.priv.h
Prereq:  1.219
--- ncurses-6.5-20240928+/test/test.priv.h 2024-08-31 10:46:01.000000000 +0000
+++ ncurses-6.5-20241006/test/test.priv.h 2024-10-05 19:01:00.000000000 +0000
@@ -30,7 +30,7 @@
/****************************************************************************
 *  Author: Thomas E. Dickey                    1996-on                 *
 ****************************************************************************/
-/* $Id: test.priv.h,v 1.219 2024/08/31 10:46:01 Rafael.Kitover Exp $ */
+/* $Id: test.priv.h,v 1.220 2024/10/05 19:01:00 tom Exp $ */

#ifndef __TEST_PRIV_H
#define __TEST_PRIV_H 1
@@ -765,8 +765,8 @@

#define VERSION_COMMON() \
static char *version_common(char **argv) { \
- char *base = argv[0]; \
- char *part = strrchr(base, '/'); \
+ const char *base = argv[0]; \
+ const char *part = strrchr(base, '/'); \
 size_t need = strlen(base) + 80; \
```

```
 char *result = malloc(need); \
 if (result != NULL) { \
@@ -916,8 +916,8 @@
 * Workaround in case getcchar() returns a positive value when the source
 * string produces only a L'\0'.
 */
-#define TEST_CCHAR(s, count, then_stmt, else_stmt) \
- if ((count = getcchar(s, NULL, NULL, NULL, NULL)) > 0) { \
+#define TEST_CCHAR(s, then_stmt, else_stmt) \
+ if (getcchar(s, NULL, NULL,
 NULL, NULL) > 0) { \
     wchar_t test_wch[CCHARW_MAX + 2]; \
     attr_t test_attrs; \
     NCURSES_PAIRS_T test_pair; \
Index: test/test_add_wchstr.c
Prereq:  1.34
--- ncurses-6.5-20240928+/test/test_add_wchstr.c 2022-12-10 22:28:50.000000000 +0000
+++ ncurses-6.5-20241006/test/test_add_wchstr.c 2024-10-05 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2020-2021,2022 Thomas E. Dickey                                *
+ * Copyright 2020-2022,2024 Thomas E. Dickey                                *
 * Copyright 2009-2016,2017 Free Software Foundation, Inc.                  *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                           *
 ****************************************************************************/
 /*
- * $Id: test_add_wchstr.c,v 1.34 2022/12/10 22:28:50 tom Exp $
+ * $Id: test_add_wchstr.c,v 1.35 2024/10/05 19:26:24 tom Exp $
 *
 * Demonstrate the waddwchstr() and wadd_wch functions.
 * Thomas Dickey - 2009/9/12
@@ -158,7 +158,7 @@
}

static void
-legend(WINDOW *win, int level, Options state, wchar_t *buffer, int length)
+legend(WINDOW *win, int level, Options state, const wchar_t *buffer, int length)
{
   const char *showstate;

Index: test/test_addchstr.c
Prereq:  1.29
--- ncurses-6.5-20240928+/test/test_addchstr.c 2022-12-10 22:28:50.000000000 +0000
+++ ncurses-6.5-20241006/test/test_addchstr.c 2024-10-05 19:26:24.000000000 +0000
@@ -1,5 +1,5 @@
```

```
/****************************************************************************
- * Copyright 2020,2022 Thomas E. Dickey                                     *
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 * Copyright 2009-2016,2017 Free Software Foundation, Inc.                  *
 *                                                                          *
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@@ -27,7 +27,7 @@
 * authorization.                                                           *
 ****************************************************************************/
/*
- * $Id: test_addchstr.c,v 1.29 2022/12/10 22:28:50 tom Exp $
+ * $Id: test_addchstr.c,v 1.30 2024/10/05 19:26:24 tom Exp $
 *
 * Demonstrate the waddchstr() and waddch functions.
 * Thomas Dickey - 2009/9/12
@@ -169,7 +169,7 @@
}

static int
-ColOf(char *buffer, int length, int margin)
+ColOf(const char *buffer, int length, int margin)
{
   int n;
   int result;
Index: test/test_addstr.c
Prereq:  1.20
--- ncurses-6.5-20240928+/test/test_addstr.c 2022-12-10 22:28:50.000000000 +0000
+++ ncurses-6.5-20241006/test/test_addstr.c 2024-10-05 19:27:33.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
-
 * Copyright 2020,2022 Thomas E. Dickey                                     *
+ * Copyright 2020-2022,2024 Thomas E. Dickey                                *
 * Copyright 2009-2016,2017 Free Software Foundation, Inc.                  *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
 * authorization.                                                           *
 ****************************************************************************/
/*
- * $Id: test_addstr.c,v 1.20 2022/12/10 22:28:50 tom Exp $
+ * $Id: test_addstr.c,v 1.21 2024/10/05 19:27:33 tom Exp $
 *
 * Demonstrate the waddstr() and waddch functions.
 * Thomas Dickey - 2009/9/12
@@ -91,7 +91,7 @@
}
```

```
static int
-ColOf(char *buffer, int length, int margin)
+ColOf(const char *buffer, int length, int margin)
{
   int n;
   int result;
Index: test/test_addwstr.c
Prereq:  1.22
---
 ncurses-6.5-20240928+/test/test_addwstr.c 2023-05-27 20:13:10.000000000 +0000
+++ ncurses-6.5-20241006/test/test_addwstr.c 2024-10-05 19:27:33.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2020-2022,2023 Thomas E. Dickey                                *
+ * Copyright 2020-2023,2024 Thomas E. Dickey                                *
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 *                                                                          *
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@@ -27,7 +27,7 @@
 * authorization.                                                           *
 ****************************************************************************/
/*
- * $Id: test_addwstr.c,v 1.22 2023/05/27 20:13:10 tom Exp $
+ * $Id: test_addwstr.c,v 1.23 2024/10/05 19:27:33 tom Exp $
 *
 * Demonstrate the waddwstr() and wadd_wch
 functions.
 * Thomas Dickey - 2009/9/12
@@ -82,7 +82,7 @@
static int n_opt = -1;

static void
-legend(WINDOW *win, int level, Options state, wchar_t *buffer, int length)
+legend(WINDOW *win, int level, Options state, const wchar_t *buffer, int length)
{
   const char *showstate;

Index: test/test_endwin.c
Prereq:  1.2
--- ncurses-6.5-20240928+/test/test_endwin.c 2023-11-10 15:17:19.000000000 +0000
+++ ncurses-6.5-20241006/test/test_endwin.c 2024-10-05 19:27:33.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2023 Thomas E. Dickey                                          *
+ * Copyright 2023,2024 Thomas E. Dickey                                     *
 *                                                                          *
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 * copy of this software and associated documentation files (the            *
```

```
@@ -26,7 +26,7 @@
  * authorization.                                           *
 ****************************************************************************/
 /*
- * $Id: test_endwin.c,v 1.2 2023/11/10 15:17:19 tom Exp $
+ * $Id: test_endwin.c,v 1.3 2024/10/05 19:27:33 tom Exp $
  */
 #include <test.priv.h>

@@ -67,7 +67,7 @@
    int rc_e1 = OK;
    int rc_e2 = OK;
    int rc_e3 = OK;
-   SCREEN *sp = NULL;
+   const SCREEN *sp = NULL;
    bool opt_e = FALSE;
    bool opt_i = FALSE;
    bool opt_n = FALSE;
Index: test/test_get_wstr.c
Prereq:  1.14
--- ncurses-6.5-20240928+/test/test_get_wstr.c 2022-12-10 23:59:13.000000000 +0000
+++ ncurses-6.5-20241006/test/test_get_wstr.c 2024-10-06 23:15:10.000000000 +0000
@@ -1,5 +1,5 @@
 /****************************************************************************
- * Copyright 2020,2022 Thomas E. Dickey                                     *
+ * Copyright 2020-2022,2024 Thomas E. Dickey                                *
  * Copyright 2007-2011,2017
  Free Software Foundation, Inc.                   *
  *                                                                          *
  * Permission is hereby granted, free of charge, to any person obtaining a  *
@@ -27,7 +27,7 @@
  * authorization.                                           *
 ****************************************************************************/
 /*
- * $Id: test_get_wstr.c,v 1.14 2022/12/10 23:59:13 tom Exp $
+ * $Id: test_get_wstr.c,v 1.16 2024/10/06 23:15:10 tom Exp $
  *
  * Author: Thomas E Dickey
  *
@@ -69,7 +69,7 @@
 }

 static int
-Remainder(WINDOW *txtwin)
+Remainder(const WINDOW *txtwin)
 {
    int result = getmaxx(txtwin) - getcurx(txtwin);
    return (result > 0) ? result : 0;
```

```
@@ -138,7 +138,7 @@
static int
recursive_test(int level, char **argv, WINDOW *strwin)
{
-    static const char *help[] =
+    static NCURSES_CONST char *help[] =
    {
 "Commands:",
 "  q,^Q,ESC       - quit this program",
Index: test/test_getstr.c
Prereq:
  1.16
--- ncurses-6.5-20240928+/test/test_getstr.c 2022-12-10 23:58:37.000000000 +0000
+++ ncurses-6.5-20241006/test/test_getstr.c 2024-10-06 22:36:46.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2020,2022 Thomas E. Dickey                                     *
+ * Copyright 2020-2022,2024 Thomas E. Dickey                                *
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 *                                                                          *
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@@ -27,7 +27,7 @@
 * authorization.                                                           *
 ****************************************************************************/
/*
- * $Id: test_getstr.c,v 1.16 2022/12/10 23:58:37 tom Exp $
+ * $Id: test_getstr.c,v 1.19 2024/10/06 22:36:46 tom Exp $
 *
 * Author: Thomas E Dickey
  *
@@ -76,7 +76,7 @@
}

static int
-Remainder(WINDOW *txtwin)
+Remainder(NCURSES_CONST WINDOW *txtwin)
{
    int result = getmaxx(txtwin) - getcurx(txtwin);
    return (result > 0) ? result : 0;
@@ -145,7 +145,7 @@
static int
recursive_test(int level, char **argv, WINDOW *strwin)
{
-    static const char *help[] =
+    static NCURSES_CONST char *help[] =
    {
 "Commands:",
 "  q,^Q,ESC       - quit this program",
```

```
Index: test/test_instr.c
Prereq:  1.13
--- ncurses-6.5-20240928+/test/test_instr.c 2024-06-29 18:42:53.000000000 +0000
+++ ncurses-6.5-20241006/test/test_instr.c 2024-10-06 21:11:54.000000000 +0000
@@ -27,7 +27,7 @@
 * authorization.                                        *
 ****************************************************************************/
/*
- * $Id: test_instr.c,v 1.13 2024/06/29 18:42:53 tom Exp $
+ * $Id: test_instr.c,v 1.15 2024/10/06 21:11:54 tom Exp $
 *
 * Author: Thomas E Dickey
 *
@@ -56,13 +56,13 @@
}

static
 void
-show_1st(WINDOW *win, int line, char *buffer)
+show_1st(WINDOW *win, int line, NCURSES_CONST char *buffer)
{
   MvWAddStr(win, line, 5, buffer);
}

static void
-showmore(WINDOW *win, int line, char *buffer)
+showmore(WINDOW *win, int line, NCURSES_CONST char *buffer)
{
   wmove(win, line, 0);
   wclrtoeol(win);
@@ -72,7 +72,7 @@
static void
show_help(WINDOW *win)
{
-    static const char *msgs[] =
+    static NCURSES_CONST char *msgs[] =
   {
 "Show file contents and a viewport from the variants of winstr."
 ,"Use h/j/k/l or arrow keys to move the viewport."
Index: test/test_inwstr.c
Prereq:  1.9
--- ncurses-6.5-20240928+/test/test_inwstr.c 2024-06-29 18:40:02.000000000 +0000
+++ ncurses-6.5-20241006/test/test_inwstr.c 2024-10-06 23:15:38.000000000 +0000
@@ -27,7 +27,7 @@
 * authorization.                                        *
 ****************************************************************************/
/*
- * $Id: test_inwstr.c,v
```

```
 1.9 2024/06/29 18:40:02 tom Exp $
+ * $Id: test_inwstr.c,v 1.11 2024/10/06 23:15:38 tom Exp $
 *
 * Author: Thomas E Dickey
 *
@@ -59,13 +59,13 @@
}

static void
-show_1st(WINDOW *win, int line, wchar_t *buffer)
+show_1st(WINDOW *win, int line, const wchar_t *buffer)
{
   (void) mvwaddwstr(win, line, 5, buffer);
}

static void
-showmore(WINDOW *win, int line, wchar_t *buffer)
+showmore(WINDOW *win, int line, const wchar_t *buffer)
{
   wmove(win, line, 0);
   wclrtoeol(win);
@@ -75,7 +75,7 @@
static void
show_help(WINDOW *win)
{
-    static const char *msgs[] =
+    static NCURSES_CONST char *msgs[] =
    {
 "Show file contents and a viewport from the variants of winwstr."
 ,"Use h/j/k/l or arrow keys to move the viewport."
Index: test/test_mouse.c
Prereq:  1.32
--- ncurses-6.5-20240928+/test/test_mouse.c 2024-08-31 10:46:01.000000000 +0000
+++ ncurses-6.5-20241006/test/test_mouse.c 2024-10-05 18:47:56.000000000 +0000
@@ -22,7 +22,7 @@
 * THE USE OR OTHER DEALINGS
 IN THE SOFTWARE.                        *
 ****************************************************************************/
/*
- * $Id: test_mouse.c,v 1.32 2024/08/31 10:46:01 Rafael.Kitover Exp $
+ * $Id: test_mouse.c,v 1.33 2024/10/05 18:47:56 tom Exp $
 *
 * Author: Leonid S Usov
 *
@@ -38,7 +38,7 @@
static void
raw_loop(void)
{
```

```
-    char *xtermcap;
+    const char *xtermcap;

    printf("Entering raw mode. Ctrl-c to quit.\n");

Index: test/test_opaque.c
Prereq:  1.15
--- ncurses-6.5-20240928+/test/test_opaque.c 2022-12-11 00:03:10.000000000 +0000
+++ ncurses-6.5-20241006/test/test_opaque.c 2024-10-05 19:27:33.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2020-2021,2022 Thomas E. Dickey                                *
+ * Copyright 2020-2022,2024 Thomas E. Dickey                                *
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 *                                                                          *
                                                                            *
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@@ -27,7 +27,7 @@
 * authorization.                                                           *
 ****************************************************************************/
/*
- * $Id: test_opaque.c,v 1.15 2022/12/11 00:03:10 tom Exp $
+ * $Id: test_opaque.c,v 1.16 2024/10/05 19:27:33 tom Exp $
 *
 * Author: Thomas E Dickey
 *
@@ -157,13 +157,13 @@
}

static int
-status_y(WINDOW *stswin, int cell)
+status_y(const WINDOW *stswin, int cell)
{
    return (cell % getmaxy(stswin));
}

static int
-status_x(WINDOW *stswin, int cell)
+status_x(const WINDOW *stswin, int cell)
{
    return (15 * (cell / getmaxy(stswin)));
}
Index: test/test_sgr.c
Prereq:  1.22
--- ncurses-6.5-20240928+/test/test_sgr.c 2023-05-27 20:13:10.000000000 +0000
+++ ncurses-6.5-20241006/test/test_sgr.c 2024-10-06 21:05:50.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
```

```
-
 * Copyright 2019-2022,2023 Thomas E. Dickey                                *
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 *                                                                          *
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@@ -30,7 +30,7 @@
/*
 * Author: Thomas E. Dickey
 *
- * $Id: test_sgr.c,v 1.22 2023/05/27 20:13:10 tom Exp $
+ * $Id: test_sgr.c,v 1.25 2024/10/06 21:05:50 tom Exp $
 *
 * A simple demo of the sgr/sgr0 terminal capabilities.
 */
@@ -142,10 +142,10 @@
#define MASK_REV  (1 << 2)

static void
-dumpit(unsigned bits, unsigned ignore, const char *sgr, const char *sgr0)
+dumpit(unsigned bits, unsigned ignore, NCURSES_CONST char *sgr, NCURSES_CONST char *sgr0)
{
-    static const char sample[] = "abcdefghijklm";
-    static
 char params[] = "SURBDBIPA";
+    static NCURSES_CONST char sample[] = "abcdefghijklm";
+    static NCURSES_CONST char params[] = "SURBDBIPA";
    unsigned n;

    printf("%4u ", bits);
@@ -177,12 +177,11 @@
static void
brute_force(const char *name)
{
-    unsigned count;
-    char *my_sgr;
-    char *my_sgr0;
-    char *my_bold;
-    char *my_revs;
-    char *my_smso;
+    NCURSES_CONST char *my_sgr;
+    NCURSES_CONST char *my_sgr0;
+    NCURSES_CONST char *my_bold;
+    NCURSES_CONST char *my_revs;
+    NCURSES_CONST char *my_smso;
    char *my_name = strdup(name);

    if (db_list) {
```

```
@@ -219,6 +218,7 @@
 unsigned ignore = 0;
 unsigned reason = 0;
 unsigned repeat = 0;
+ unsigned count;
 for (count = 0; count < MAXSGR; ++count) {
     values[count] = tparm(my_sgr,
      BITS2P(1),
@@ -334,7 +334,7 @@
main(int argc, char *argv[])
{
    int ch;
-    char *name;
+    const char *name;

    while ((ch = getopt(argc, argv, OPTS_COMMON "d:e:nq")) != -1) {
 switch (ch)
 {
@@ -369,7 +369,7 @@
    } else if ((name = getenv("TERM")) != 0) {
 brute_force(name);
    } else {
- static char dumb[] = "dumb";
+ static const char dumb[] = "dumb";
 brute_force(dumb);
    }

Index: test/test_tparm.c
Prereq:  1.39
--- ncurses-6.5-20240928+/test/test_tparm.c 2023-11-11 01:00:03.000000000 +0000
+++ ncurses-6.5-20241006/test/test_tparm.c 2024-10-06 20:50:27.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
- * Copyright 2020-2022,2023 Thomas E. Dickey                                *
+ * Copyright 2020-2023,2024 Thomas E. Dickey                                *
 *                                                                          *
 * Permission is hereby granted, free of charge, to any person obtaining a  *
 * copy of this software and associated documentation files (the            *
@@ -29,7 +29,7 @@
/*
 * Author: Thomas E. Dickey
 *
- * $Id: test_tparm.c,v 1.39 2023/11/11 01:00:03
 tom Exp $
+ * $Id: test_tparm.c,v 1.42 2024/10/06 20:50:27 tom Exp $
 *
 * Exercise tparm/tiparm, either for all possible capabilities with fixed
 * parameters, or one capability with specific combinations of parameters.
```

```
@@ -107,7 +107,7 @@
}

static int
-isNumeric(char *source)
+isNumeric(NCURSES_CONST char *source)
{
   char *next = 0;
   long value = strtol(source, &next, 0);
@@ -245,7 +245,7 @@
#define NS_9(fmt) NS_8(fmt), NumStr(8)

static void
-test_tparm(const char *name, const char *format, long *number, char **string)
+test_tparm(const char *name, NCURSES_CONST char *format, long *number, char **string)
{
   char *use_strings[MAX_PARM];
   char *result = NULL;
@@ -527,7 +527,7 @@
    }
 } else {
    char *s = t_opt;
-    char *t;
+    NCURSES_CONST char *t;
    while ((t = strtok(s, ",")) != 0) {
  s = 0;
  if (len_terms + 2 >= max_terms) {
@@ -603,7 +603,7 @@
#if NCURSES_XNAMES
    len_caps = std_caps;
    if (cur_term) {
-  TERMTYPE *term =
 (TERMTYPE *) cur_term;
+  NCURSES_CONST TERMTYPE *term = (TERMTYPE *) cur_term;
  for (n = STRCOUNT; n < NUM_STRINGS(term); ++n) {
     GrowArray(all_caps, max_caps, len_caps);
     GrowArray(cap_name, max_name, len_caps);
Index: test/test_vidputs.c
Prereq:  1.15
--- ncurses-6.5-20240928+/test/test_vidputs.c 2022-12-10 23:23:27.000000000 +0000
+++ ncurses-6.5-20241006/test/test_vidputs.c 2024-10-06 21:17:54.000000000 +0000
@@ -1,5 +1,5 @@
/****************************************************************************
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```

```
@@ -27,7 +27,7 @@
 * authorization.
                *
 ******************************************************************************/
/*
- * $Id: test_vidputs.c,v 1.15 2022/12/10 23:23:27 tom Exp $
+ * $Id: test_vidputs.c,v 1.16 2024/10/06 21:17:54 tom Exp $
 *
 * Demonstrate the vidputs and vidattr functions.
 * Thomas Dickey - 2013/01/12
@@ -51,7 +51,7 @@
}

static bool
-outs(const char *s)
+outs(NCURSES_CONST char *s)
{
   if (VALID_STRING(s)) {
 tputs(s, 1, outc);
Index: test/testcurs.c
Prereq:  1.58
--- ncurses-6.5-20240928+/test/testcurs.c 2023-05-28 14:23:34.000000000 +0000
+++ ncurses-6.5-20241006/test/testcurs.c 2024-10-05 19:17:19.000000000 +0000
@@ -6,7 +6,7 @@
 *  wrs(5/28/93) -- modified to be consistent (perform identically) with either
 *                  PDCurses or under Unix System V, R4
 *
- * $Id: testcurs.c,v 1.58 2023/05/28 14:23:34 tom Exp $
+ * $Id: testcurs.c,v 1.59 2024/10/05 19:17:19 tom Exp $
 */

#include <test.priv.h>
@@ -245,7 +245,7 @@
 wclrtobot(win);
 if (c >= KEY_MIN)
     wprintw(win, "Key Pressed: %s", keyname(c));
- else if (isprint(c))
+ else if (isprint(UChar(c)))
    wprintw(win, "Key Pressed: %c", c);
 else
    wprintw(win, "Key Pressed: %s", unctrl(UChar(c)));
@@ -748,8 +748,8 @@
 keypad(stdscr, TRUE);
 raw();
 key = getch();
- if (key < KEY_MIN && key > 0 && isalpha(key)) {
-     if (islower(key))
+ if (key < KEY_MIN && key > 0 && isalpha(UChar(key))) {
```

```
+     if (islower(UChar(key)))
  key = toupper(key);
     for (n = 0; n < MAX_OPTIONS; ++n) {
  if (key == command[n].text[0]) {
Index: test/testscanw.c
Prereq:  1.15
--- ncurses-6.5-20240928+/test/testscanw.c 2022-12-11 00:10:29.000000000 +0000
+++ ncurses-6.5-20241006/test/testscanw.c 2024-10-05 19:27:33.000000000 +0000
@@ -1,5 +1,5 @@
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@@ -30,7 +30,7 @@
  * Date:  1997/03/17
  * From:  bayern@morpheus.cis.yale.edu
  *
- * $Id: testscanw.c,v 1.15 2022/12/11 00:10:29 tom Exp $
+ * $Id: testscanw.c,v 1.16 2024/10/05 19:27:33 tom Exp $
  */
#include <test.priv.h>

@@ -85,7 +85,7 @@
    curses_trace(TRACE_UPDATE | TRACE_CALLS);
#endif
    while (optind < argc) {
- char *token = argv[optind++];
+ const char *token = argv[optind++];
  if (isdigit(UChar(*token)))
     move(atoi(token), 0);
  else if (!strcmp(token, "k+"))
Index: test/view.c
Prereq:  1.145
--- ncurses-6.5-20240928+/test/view.c 2022-12-04 00:40:11.000000000 +0000
+++ ncurses-6.5-20241006/test/view.c 2024-10-06 21:08:05.000000000 +0000
@@ -1,5 +1,5 @@
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@@ -52,7 +52,7 @@
  * scroll operation worked, and the refresh() code only had to do a
```

```
 * partial repaint.
 *
- * $Id: view.c,v 1.145 2022/12/04 00:40:11 tom Exp $
+ * $Id: view.c,v 1.147 2024/10/06 21:08:05 tom Exp $
 */

#include <test.priv.h>
@@ -93,8 +93,7 @@

#if USE_WIDEC_SUPPORT
    for (;;) {
- int count;
- TEST_CCHAR(src, count, {
+ TEST_CCHAR(src, {
     int len = wcwidth(test_wch[0]);
     result += (len > 0) ? len : 1;
     ++src;
@@ -186,12 +185,10 @@
      */
     {
  int j;
-  int width = 1;
+  int width;

  for (j = actual = 0; j < shift; ++j) {
-      int count;
-
-
+
    TEST_CCHAR(s + j, count, {
+      TEST_CCHAR(s + j, {
   width = wcwidth(test_wch[0]);
      }
      , {
@@ -294,7 +291,7 @@

#if USE_WIDEC_SUPPORT
    if (!memcmp("\357\273\277", my_blob, 3)) {
- char *s = my_blob + 3;
+ const char *s = my_blob + 3;
 char *d = my_blob;
 Trace(("trim BOM"));
 do {
@@ -329,7 +326,7 @@
 char *s;
 int y, x;
#if USE_WIDEC_SUPPORT
- char *last = my_vec[k] + (int) strlen(my_vec[k]);
+ const char *last = my_vec[k] + (int) strlen(my_vec[k]);
```

```
 wchar_t wch[2];
 size_t rc;
#ifndef state_unused
@@ -408,7 +405,7 @@
int
main(int argc, char *argv[])
{
-    static const char *help[] =
+    static NCURSES_CONST char *help[] =
     {
 "Commands:",
 "  q,^Q,ESC       - quit this program",
@@ -659,7 +656,7 @@
     beep();
     break;
 }
- if (c >= KEY_MIN || (c > 0 && !isdigit(c))) {
+ if (c >= KEY_MIN || (c > 0 && !isdigit(UChar(c)))) {
     got_number = FALSE;
     value = 0;
 }
```

Found in path(s):
* /ncurses-6-5-20241006-patch-gz/ncurses-6.5-20241006.patch

1.60 scanelf 1.3.8-r1

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1.61 utmps-libs 0.1.2.3-r2

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1.62 skalibs-libs 2.14.3.0-r0

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1.75 busybox 1.37.0-r12

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Julian Seward, Cambridge, UK.
jseward@bzip.org
bzip2/libbzip2 version 1.0.4 of 20 December 2006
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1.76 ssl-client 1.37.0-r12

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pkgname=perl-bsd-resource
pkgver=1.2911
pkgrel=10
#_pkgreal is used by apkbuild-cpan to find modules at MetaCpan
_pkgreal=BSD-Resource
pkgdesc="Perl extension implements the BSD process resource limit functions"
url="https://metacpan.org/release/BSD-Resource/"
arch="all"
license="Artistic-2.0 OR LGPL-2.0"
depends="perl"
makedepends="perl-dev"
subpackages="$pkgname-doc"
source="https://cpan.metacpan.org/authors/id/J/JH/JHI/BSD-Resource-$pkgver.tar.gz"
builddir="$srcdir/$_pkgreal-$pkgver"

build() {
 export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
 PERL_MM_USE_DEFAULT=1 perl -I. Makefile.PL \
  INSTALLDIRS=vendor \
  NO_PACKLIST=1 \
  NO_PERLLOCAL=1
 make
}

check() {
 export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
```

```
 make test
}

package() {
 make DESTDIR="$pkgdir" install
}

sha512sums="
d0032d41c7c0468ed1c6d8f57b885f6cb97a5039d754c8cb60b2067daedaf53bd15fb6561a3d0f828df16dfa5417f663b
8065ba65f4fea16dc9262728b3b6b85
  BSD-Resource-1.2911.tar.gz
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Public License instead of this License.
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Maintainer: mio <miyopan@e.email>
pkgname=bsd-games
pkgver=3.3
pkgrel=2
pkgdesc="traditional text mode games from BSD"
url="https://bsd-games.sourceforge.io/"
arch="all"
license="BSD-3-Clause"
install="$pkgname.post-install"
makedepends="ncurses-dev coreutils" # configure causes busybox expr error

```
subpackages="$pkgname-doc"
source="https://sourceforge.net/projects/bsd-games/files/bsd-games-$pkgver.tar.gz
 0001-bsd-games-scores-dir.patch
 "
options="!check" # no tests

build() {
 # some GNU autoconf options are ignored, but it works
 ./configure \
  --build=$CBUILD \
  --host=$CHOST \
  --prefix=/usr \
  --sysconfdir=/etc \
  --mandir=/usr/share/man \
  --scoredir=/usr/share/$pkgname
 make
}

package() {
 make DESTDIR="$pkgdir" install
 install -Dm644 LICENSE "$pkgdir"/usr/share/licenses/bsd-games/LICENSE
}

sha512sums="
aaf36d09d4fe68514a5c279063d7e77a9a9a84c447037cba974b29faa07eb80c2aab2379d0699c196b5c27ffe1b2bb2c6
8d3390143e0e62d5e3d210ccfb61294
  bsd-games-3.3.tar.gz
e1def0d4835a877242c4173fae862e278a7858738e0bacacbb045a42bcabec2aa7c72d000bbd2421ce35fe66cdc1f52c0
577b7e278029ca5ed50f7aab22319f6  0001-bsd-games-scores-dir.patch
"
```

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http://members.nbci.com/silicon39/
http://www.mp3.com/silicon39
https://analoguesque.x10host.com/
Maintainer: Natanael Copa <ncopa@alpinelinux.org>
pkgname=libart-lgpl
pkgver=2.3.21
pkgrel=8
pkgdesc="A library for high-performance 2D graphics"
url="https://www.levien.com/libart/"
arch="all"
options="!check" # No test suite.
license="LGPL-2.0-or-later"
subpackages="$pkgname-dev"
source="https://download.gnome.org/sources/libart_lgpl/2.3/libart_lgpl-$pkgver.tar.bz2
 "

builddir="$srcdir"/libart_lgpl-$pkgver

prepare() {
 update_config_sub
 default_prepare
}

build() {
 ./configure \
  --build=$CBUILD \

```
  --host=$CHOST \
  --prefix=/usr
 make
}

package() {
 make DESTDIR="$pkgdir" install
}

sha512sums="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e7
6654309e001aee9bace727b5b4c8589405256a3c020  libart_lgpl-2.3.21.tar.bz2"
```

```
mini_sendmail - accept email on behalf of real sendmail

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```

```
# Contributor: Carlo Landmeter <clandmeter@alpinelinux.org>
# Maintainer: Kevin Daudt <kdaudt@alpinelinux.org>
pkgname=spdx-licenses
pkgver=3.26.0
pkgrel=0
pkgdesc="Various data formats for the SPDX License List"
url="https://spdx.org/"
arch="noarch"
options="!check" # no test suite
license="CC-BY-3.0"
source="license-list-data-$pkgver.tar.gz::https://github.com/spdx/license-list-data/archive/v$pkgver.tar.gz"
```

```
builddir="$srcdir/license-list-data-$pkgver"
subpackages="$pkgname-list"

_types="html json rdfa rdfnt rdfturtle rdfxml template text"

for type in $_types; do
 subpackages="$subpackages $pkgname-$type:_subpkg"
done

package() {
 mkdir -p "$pkgdir"
}

_subpkg() {
 local type=${subpkgname/$pkgname-/}
 pkgdesc="$pkgdesc ($type)"
 install_if="$pkgname=$pkgver-r$pkgrel"
 mkdir -p "$subpkgdir"/usr/share/spdx
 cp -r "$builddir"/$type "$subpkgdir"/usr/share/spdx/
}

list() {
 pkgdesc="$pkgdesc (licence list)"
 mkdir -p "$subpkgdir"/usr/share/spdx
 local i; for i in "$builddir"/text/*.txt;
 do
  local license=${i##*/}
  echo ${license%.*} >> "$subpkgdir"/usr/share/spdx/license.lst
 done
}

sha512sums="
67e618d4642dfe4f366935d9514d6f7941d3711e77c49bc1b340ac572d36015981b8f10c72a9f80f1d83e132ae7e5093c
0155e0c0e786e4777ee16d1cb7b885a  license-list-data-3.26.0.tar.gz
"
# Contributor: Patrycja Rosa <alpine@ptrcnull.me>
# Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=bsd-compat-headers
pkgver=0.7.2
pkgrel=6
pkgdesc="BSD compatibility headers (cdefs, queue, tree)"
url="https://gitlab.alpinelinux.org/alpine/aports"
arch="noarch"
license="BSD-2-Clause AND BSD-3-Clause"
source="
 cdefs.h
 queue.h
 tree.h
```

"
builddir="$srcdir"
options="!check" # just headers

package() {
 mkdir -p "$pkgdir"
 install -Dm644 -t "$pkgdir"/usr/include/sys \
  cdefs.h queue.h tree.h
}
sha512sums="
37c8fc73c7aea7b490f7850927e2bb91d12137c9e59e22c084146d515696dbc7973b5de92f4c987ba080dd2502ba83127006442c3f019b6447a620c0cae73178 cdefs.h
2f0d5e6e4dc3350285cf17009265dddcbe12431c111868eea39bc8cb038ab7c1f2acacbb21735c4e9d4a1fd106a8fc0f8611ea33987d4faba37dde5ce6da0750 queue.h
d9ac210d81feb8ad2655bc80fb065d3fe20ae4417b32b4a1711e6738a4870140005c13373b5d1846ef3ce5ae6da45f2dacef2092881eded0a2e94f6a07752ef3 tree.h
"
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The X-Spline code was written Carole Blanc (blanc@labri.u-bordeaux.fr) and Christophe Schlick (schlick@labri.u-bordeaux.fr) starting from an initial implementation done by C. Feuille, S. Grosbois, L. Maziere and L. Minihot as a student practice (Universite Bordeaux, France). For additional information about X-splines, see:
"X-Splines: A Spline Model Designed for the End User" by C. Blanc and C. Schlick, Proceedings of SIGGRAPH'95
http://dept-info.labri.u-bordeaux.fr/~schlick/DOC/sig1.html
Contributor: Dhruvin Gandhi <contact@dhru.vin>
Maintainer: Patrycja Rosa <alpine@ptrcnull.me>

```
pkgname=py3-license-expression
_pkgname=license_expression
pkgver=30.4.1
pkgrel=0
pkgdesc="Library to parse, compare, simplify and normalize license expressions"
url="https://github.com/nexB/license-expression"
arch="noarch"
license="Apache-2.0"
depends="python3 py3-boolean.py"
makedepends="py3-setuptools py3-setuptools_scm py3-gpep517 py3-wheel"
checkdepends="py3-pytest py3-pytest-xdist"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/l/$_pkgname/$_pkgname-$pkgver.tar.gz"
builddir="$srcdir/$_pkgname-$pkgver"

build() {
 gpep517 build-wheel \
  --wheel-dir .dist \
  --output-fd 3 3>&1 >&2
}

check() {
 python3 -m venv --clear --without-pip --system-site-packages .testenv
 .testenv/bin/python3 -m installer .dist/*.whl
 .testenv/bin/python3 -m pytest
}

package() {
 python3 -m installer -d "$pkgdir" \
  .dist/*.whl
}

sha512sums="
114c630f098939757e49187e35b4e54883266a2ee9ca283724992420ef4c860f9606a8342da0ab74d93627c10805f312
fda3f699cbc7c4fbd47a71e220440fb0
  license_expression-30.4.1.tar.gz
"
# Contributor: Fabian Affolter <fabian@affolter-engineering.ch>
# Maintainer: Fabian Affolter <fabian@affolter-engineering.ch>
pkgname=py3-flake8-copyright
_pkgname=flake8-copyright
pkgver=0.2.4
pkgrel=3
pkgdesc="Extension for flake8 which checks for copyrights"
options="!check" # No testsuite
url="https://github.com/savoirfairelinux/flake8-copyright"
arch="noarch"
license="MIT"
```

```
depends="py3-flake8 py3-setuptools"
makedepends="py3-gpep517 py3-wheel"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/${_pkgname:0:1}/$_pkgname/$_pkgname-$pkgver.tar.gz"
builddir="$srcdir"/$_pkgname-$pkgver

replaces="py-flake8-copyright"                  # Backwards compatibility
provides="py-flake8-copyright=$pkgver-r$pkgrel" # Backwards compatibility

build() {
 gpep517 build-wheel \
  --wheel-dir .dist \
  --output-fd 3 3>&1 >&2
}

package() {
 gpep517 install-wheel --destdir "$pkgdir" \
  .dist/*.whl
}

sha512sums="
a6ab47e1bb715618f075c51f398e18180404871b3b0faf1c2d30701d5203db6bc23771bf22ffb5bafcd8ee856b9b64237
b316bd503ae7dceed6ca284ccd5a74d
  flake8-copyright-0.2.4.tar.gz
"
# Maintainer: fossdd <fossdd@pwned.life>
pkgname=cargo-license
pkgver=0.6.1
pkgrel=1
pkgdesc="Cargo subcommand to see license of dependencies"
url="https://github.com/onur/cargo-license"
arch="all"
license="MIT"
makedepends="cargo cargo-auditable"
source="$pkgname-$pkgver.tar.gz::https://crates.io/api/v1/crates/cargo-license/$pkgver/download"

prepare() {
 default_prepare

 cargo fetch --target="$CTARGET" --locked
}

build() {
 cargo auditable build --release --frozen
}

check() {
 cargo test --frozen
```

```
}

package() {
 install -Dm755 target/release/cargo-license -t "$pkgdir"/usr/bin
}

sha512sums="
36215145e79965be090ae2f5ce6f5eb208465eb67a94c26bed1fe70a131c46c6dc35695e30852759b7366883fbc3caf00
272d796ac634f0a5e1d49232b6b29d5  cargo-license-0.6.1.tar.gz
"
```

1.77 go-colorable 0.1.14

1.77.1 Available under license :

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1.78 ca-certificates-bundle 20241121-r1

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```
# Contributor: Patrycja Rosa <alpine@ptrcnull.me>
# Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=bsd-compat-headers
pkgver=0.7.2
pkgrel=6
pkgdesc="BSD compatibility headers (cdefs, queue, tree)"
```

```
url="https://gitlab.alpinelinux.org/alpine/aports"
arch="noarch"
license="BSD-2-Clause AND BSD-3-Clause"
source="
 cdefs.h
 queue.h
 tree.h
"
builddir="$srcdir"
options="!check" # just headers

package() {
 mkdir -p "$pkgdir"
 install -Dm644 -t "$pkgdir"/usr/include/sys \
  cdefs.h queue.h tree.h
}
sha512sums="
37c8fc73c7aea7b490f7850927e2bb91d12137c9e59e22c084146d515696dbc7973b5de92f4c987ba080dd2502ba8312
7006442c3f019b6447a620c0cae73178  cdefs.h
2f0d5e6e4dc3350285cf17009265dddcbe12431c111868eea39bc8cb038ab7c1f2acacbb21735c4e9d4a1fd106a8fc0f86
11ea33987d4faba37dde5ce6da0750  queue.h
d9ac210d81feb8ad2655bc80fb065d3fe20ae4417b32b4a1711e6738a4870140005c13373b5d1846ef3ce5ae6da45f2da
cef2092881eded0a2e94f6a07752ef3  tree.h
"
# Maintainer: Natanael Copa <ncopa@alpinelinux.org>
pkgname=libart-lgpl
pkgver=2.3.21
pkgrel=8
pkgdesc="A library for high-performance 2D graphics"
url="https://www.levien.com/libart/"
arch="all"
options="!check"  # No test suite.
license="LGPL-2.0-or-later"
subpackages="$pkgname-dev"
source="https://download.gnome.org/sources/libart_lgpl/2.3/libart_lgpl-$pkgver.tar.bz2
 "

builddir="$srcdir"/libart_lgpl-$pkgver

prepare() {
 update_config_sub
 default_prepare
}

build() {
 ./configure \
  --build=$CBUILD \
  --host=$CHOST \
```

```
 --prefix=/usr
 make
}

package() {
 make DESTDIR="$pkgdir" install
}

sha512sums="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e7
6654309e001aee9bace727b5b4c8589405256a3c020  libart_lgpl-2.3.21.tar.bz2"
```

1.79 alpine-baselayout-data 3.6.8-r1

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```
# Automatically generated by apkbuild-cpan, template 1
# Contributor: Francesco Colista <francesco.colista@gmail.com>
# Maintainer: Francesco Colista <francesco.colista@gmail.com>
pkgname=perl-software-license
_pkgreal=Software-License
pkgver=0.103004
pkgrel=0
pkgdesc="packages that provide templated software licenses"
url="http://search.cpan.org/dist/Software-License/"
arch="noarch"
license="GPL PerlArtistic"
cpandepends="perl-text-template perl-data-section perl-sub-install"
cpanmakedepends="    "
depends="$cpandepends"
makedepends="perl-dev $cpanmakedepends"
subpackages="$pkgname-doc"
source="http://search.cpan.org/CPAN/authors/id/R/RJ/RJBS/$_pkgreal-$pkgver.tar.gz"

_builddir="$srcdir/$_pkgreal-$pkgver"

prepare() {
 cd "$_builddir"
 export CFLAGS=`perl -MConfig -E 'say $Config{ccflags}'`
 PERL_MM_USE_DEFAULT=1 perl Makefile.PL INSTALLDIRS=vendor
}

build() {
 cd "$_builddir"
 export CFLAGS=`perl -MConfig -E 'say $Config{ccflags}'`
 make && make test
}

package() {
```

```
 cd "$_builddir"
 make
 DESTDIR="$pkgdir" install || return 1
 find "$pkgdir" \( -name perllocal.pod -o -name .packlist \) -delete
}

md5sums="0c5fd53d93818566234578b27d667b35  Software-License-0.103004.tar.gz"
```

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pkgname=py-flake8-copyright
_pkgname=flake8-copyright
pkgver=0.2.0
pkgrel=0
pkgdesc="Extension for flake8 which checks for copyrights"
url="https://github.com/savoirfairelinux/flake8-copyright"
arch="noarch"
license="MIT"
depends="flake8"
makedepends="python3-dev"
source="https://files.pythonhosted.org/packages/source/${_pkgname:0:1}/$_pkgname/$_pkgname-$pkgver.tar.gz"
builddir="$srcdir"/$_pkgname-$pkgver

build() {

```
 cd "$builddir"
 python3 setup.py build || return 1
}

package() {
 cd "$builddir"
 python3 setup.py install --prefix=/usr --root="$pkgdir" || return 1
}

md5sums="c6348990c6d74933bf5d5f6a55a14bdf  flake8-copyright-0.2.0.tar.gz"
sha256sums="aeef26eb4d5223c9cd5b101e68175fcef6d2b353bf36da688fdde62fccfe2b73  flake8-copyright-
0.2.0.tar.gz"
sha512sums="bab1bfaeed3a525ac3c7da12b1f2ec338c204cc69b72d05cd39560e528faff5d586c3b1be9570f4a977a7e
2417b586e543bfba12abce256b2023c8c4993eeb90
  flake8-copyright-0.2.0.tar.gz"
```

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Maintainer: Natanael Copa <ncopa@alpinelinux.org>
pkgname=libart-lgpl
pkgver=2.3.21
pkgrel=5
pkgdesc="A library for high-performance 2D graphics"
url="http://www.levien.com/libart/"
arch="all"
license="LGPL"
depends=
makedepends=
subpackages="$pkgname-dev"
source="http://ftp.gnome.org/pub/GNOME/sources/libart_lgpl/2.3/libart_lgpl-$pkgver.tar.bz2

```
 "

_builddir="$srcdir"/libart_lgpl-$pkgver

prepare() {
 cd "$_builddir"
 update_config_sub || return 1
}
build() {
 cd "$_builddir"
 ./configure \
  --build=$CBUILD \
  --host=$CHOST \
  --prefix=/usr \
  || return 1
 make || return 1
}

package() {
 cd "$_builddir"
 make DESTDIR="$pkgdir" install || return 1
}

md5sums="08559ff3c67fd95d57b0c5e91a6b4302  libart_lgpl-2.3.21.tar.bz2"
# Automatically generated by apkbuild-cpan, template 1
# Contributor: Valery Kartel <valery.kartel@gmail.com>
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pkgname=perl-bsd-resource
_pkgreal=BSD-Resource
pkgver=1.2909
pkgrel=1
pkgdesc="Perl extension implements the BSD process resource limit functions"
url="http://search.cpan.org/dist/BSD-Resource/"
arch="all"
license="GPL PerlArtistic"
cpandepends=""
cpanmakedepends="    "
depends="$cpandepends"
makedepends="perl-dev $cpanmakedepends"
subpackages="$pkgname-doc"
source="http://search.cpan.org/CPAN/authors/id/J/JH/JHI/$_pkgreal-$pkgver.tar.gz"

_builddir="$srcdir/$_pkgreal-$pkgver"

prepare() {
 cd "$_builddir"
 export CFLAGS=`perl -MConfig -E 'say $Config{ccflags}'`
 PERL_MM_USE_DEFAULT=1 perl Makefile.PL INSTALLDIRS=vendor
```

```
}

build() {
 cd "$_builddir"
 export CFLAGS=`perl -MConfig -E 'say $Config{ccflags}'`
 make && make test || return 1
}

package() {
 cd "$_builddir"
 make DESTDIR="$pkgdir" install || return 1
 find "$pkgdir"
 \( -name perllocal.pod -o -name .packlist \) -delete
}

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sha256sums="c47d460e2bd00d8d049f6ff4a0f1f61957e289e8de45af5fc79e851e2e855e06  BSD-Resource-
1.2909.tar.gz"
sha512sums="5f489eaac5089e82081b7cf51d62638750e443751b49415407354da96b17771819b5e6e85529faa41ddd
85743363750157943c7f7700276cce2bd40a429fa430  BSD-Resource-1.2909.tar.gz"
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1.88 randstr 1.0.6

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1.90 musl-utils 1.2.5-r9

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1.91 apk-tools 2.14.6-r3

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1.93 gogo-protobuf 1.3.2

1.93.1 Available under license :

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Protocol Buffers for Go with Gadgets

Go support for Protocol Buffers - Google's data interchange format

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https://github.com/golang/protobuf

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Todd Eisenberger <teisenberger@dropbox.com>
Tormod Erevik Lea <tormodlea@gmail.com>
Vyacheslav Kim <kane@sendgrid.com>
Walter Schulze <awalterschulze@gmail.com>

1.94 alpine-release 3.21.3-r0

1.94.1 Available under license :

```
# Automatically generated by apkbuild-cpan, template 4
# Contributor: Valery Kartel <valery.kartel@gmail.com>
# Maintainer: Celeste <cielesti@protonmail.com>
maintainer="Celeste <cielesti@protonmail.com>"
pkgname=perl-bsd-resource
pkgver=1.2911
pkgrel=10
#_pkgreal is used by apkbuild-cpan to find modules at MetaCpan
_pkgreal=BSD-Resource
pkgdesc="Perl extension implements the BSD process resource limit functions"
url="https://metacpan.org/release/BSD-Resource/"
arch="all"
license="Artistic-2.0 OR LGPL-2.0"
depends="perl"
makedepends="perl-dev"
subpackages="$pkgname-doc"
source="https://cpan.metacpan.org/authors/id/J/JH/JHI/BSD-Resource-$pkgver.tar.gz"
builddir="$srcdir/$_pkgreal-$pkgver"

build() {
 export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
 PERL_MM_USE_DEFAULT=1 perl -I. Makefile.PL \
  INSTALLDIRS=vendor \
  NO_PACKLIST=1 \
  NO_PERLLOCAL=1
 make
}

check() {
 export CFLAGS=$(perl -MConfig -E 'say $Config{ccflags}')
 make test
}
```

```
package() {
 make DESTDIR="$pkgdir" install
}

sha512sums="
d0032d41c7c0468ed1c6d8f57b885f6cb97a5039d754c8cb60b2067daedaf53bd15fb6561a3d0f828df16dfa5417f663b
8065ba65f4fea16dc9262728b3b6b85
  BSD-Resource-1.2911.tar.gz
"
# Maintainer: fossdd <fossdd@pwned.life>
pkgname=cargo-license
pkgver=0.6.1
pkgrel=1
pkgdesc="Cargo subcommand to see license of dependencies"
url="https://github.com/onur/cargo-license"
arch="all"
license="MIT"
makedepends="cargo cargo-auditable"
source="$pkgname-$pkgver.tar.gz::https://crates.io/api/v1/crates/cargo-license/$pkgver/download"

prepare() {
 default_prepare

 cargo fetch --target="$CTARGET" --locked
}

build() {
 cargo auditable build --release --frozen
}

check() {
 cargo test --frozen
}

package() {
 install -Dm755 target/release/cargo-license -t "$pkgdir"/usr/bin
}

sha512sums="
36215145e79965be090ae2f5ce6f5eb208465eb67a94c26bed1fe70a131c46c6dc35695e30852759b7366883fbc3caf00
272d796ac634f0a5e1d49232b6b29d5  cargo-license-0.6.1.tar.gz
"
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```

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```
# Contributor: Dhruvin Gandhi <contact@dhru.vin>
# Maintainer: Patrycja Rosa <alpine@ptrcnull.me>
pkgname=py3-license-expression
_pkgname=license_expression
pkgver=30.4.0
pkgrel=0
pkgdesc="Library to parse, compare, simplify and normalize license expressions"
url="https://github.com/nexB/license-expression"
arch="noarch"
license="Apache-2.0"
depends="python3 py3-boolean.py"
makedepends="py3-setuptools py3-setuptools_scm py3-gpep517 py3-wheel"
checkdepends="py3-pytest py3-pytest-xdist"
subpackages="$pkgname-pyc"
source="https://files.pythonhosted.org/packages/source/l/$_pkgname/$_pkgname-$pkgver.tar.gz"
builddir="$srcdir/$_pkgname-$pkgver"

build() {
 gpep517 build-wheel \
  --wheel-dir .dist \
  --output-fd 3 3>&1 >&2
}

check() {
 python3 -m venv --clear --without-pip --system-site-packages .testenv
 .testenv/bin/python3 -m installer .dist/*.whl
 .testenv/bin/python3 -m pytest
}

package() {
```

```
 python3 -m installer -d "$pkgdir" \
  .dist/*.whl
}

sha512sums="
cc7cd6b5bd8ea4c99b66f074871ffd7cc78b3e8b1b0d3afd9b95efdb7147c8293db2fac977d684fc34d3d60bd79066a06
dc2bff0a38b130d9d83c63538502db1
  license_expression-30.4.0.tar.gz
"
```

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LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY
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SUCH DAMAGE.
Maintainer: Natanael Copa <ncopa@alpinelinux.org>
pkgname=libart-lgpl
pkgver=2.3.21
pkgrel=8
pkgdesc="A library for high-performance 2D graphics"
url="https://www.levien.com/libart/"
arch="all"
options="!check" # No test suite.
license="LGPL-2.0-or-later"
subpackages="$pkgname-dev"
source="https://download.gnome.org/sources/libart_lgpl/2.3/libart_lgpl-$pkgver.tar.bz2
 "

builddir="$srcdir"/libart_lgpl-$pkgver

prepare() {
 update_config_sub
 default_prepare

```
}

build() {
 ./configure \
  --build=$CBUILD \
  --host=$CHOST \
  --prefix=/usr
 make
}

package() {
 make DESTDIR="$pkgdir" install
}

sha512sums="8a632a6a4da59e5e8c02ec2f5a57e36d182b325b46513765425e5f171ff9ae326af1b133725beba28f7e7
6654309e001aee9bace727b5b4c8589405256a3c020  libart_lgpl-2.3.21.tar.bz2"
```

1.95 github.com/aws/aws-sdk-go-v2/service/internal/accept-encoding 1.12.3

1.95.1 Available under license :

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

package licensemanager

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

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

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

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

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

type CheckoutLicenseInput struct {

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

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

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

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

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

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {
```

```
// Checkout type.
CheckoutType types.CheckoutType

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

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

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

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

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

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

noSmithyDocumentSerde
}

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

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

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

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

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

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
```

```
  runs-on: ubuntu-latest
  strategy:
    matrix:
      python-version: [3.9]

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

package grafana
```

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

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

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

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

type DisassociateLicenseInput struct {

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

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

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
```

```
 // This member is required.
 Workspace *types.WorkspaceDescription

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

 noSmithyDocumentSerde
}

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

                }
            },
            "InstanceUserArn": {
```

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

        }
          }
```

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

```
            "name": "license-manager-user-subscriptions"
          },
          "aws.protocols#restJson1": {},
          "smithy.api#cors": {
            "additionalAllowedHeaders": [
              "*",
              "content-type",
              "x-amz-content-sha256",
              "x-amz-user-agent",
              "x-amzn-platform-id",
              "x-amzn-trace-id",
              "content-length",
              "x-api-key",

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

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

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

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

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

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

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

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

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

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

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

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

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

        ],
            "type": "tree"
```

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

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

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

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

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

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

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

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

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

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

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

```
            }
          },

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

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

    "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
```

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

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

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

```
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS \n\t\t\tlicense server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's associated with \n\t\t\tthe RDS license server endpoint.</p>"
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>"
                }
            },
            "ServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is one.</p>"
                }
            },
            "LicenseServerEndpointId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
                }
            },
```

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

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

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

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

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

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

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

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

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

```
        "type": "operation",
        "input": {

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

```
        "members": {
          "MaxResults": {

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

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

            "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits":
 {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n              <p>IdentityProviderArn</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
             "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
```

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

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

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

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

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"

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

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

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

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

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

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

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

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

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

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

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

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

```
                "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                "smithy.api#length": {
                  "min": 1
                }
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
          "type": "string",
          "traits": {
            "smithy.api#length": {
              "min": 5,
              "max": 200
            },
            "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
          "type": "structure",
          "members": {
            "Endpoint": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
          "type": "union",
          "members": {
            "RdsSalSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource
 contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
              }
            }
          },
```

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

```
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n <note>\n <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
```

```
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/StartProductSubscription"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
         "type":
 "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                  "smithy.api#required": {}
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>",
                  "smithy.api#required": {}
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
               }
            },
            "Tags": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
               "traits": {
                  "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
               }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse":
{
        "type": "structure",
        "members": {
            "ProductUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },

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

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

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

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

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

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

 "smithy.api#idempotent": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
    "type": "structure",
    "members": {
      "ResourceArn": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
        "traits": {
```

```
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want to tag.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags to apply to the specified resource.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Tags": {
          "type": "map",
          "key": {
            "target": "smithy.api#String"
          },
          "value": {
            "target": "smithy.api#String"
          },
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 50
            },
            "smithy.api#sensitive": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
```

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

```
                "traits": {

 "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },

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

```
            "uri": "/identity-provider/UpdateIdentityProviderSettings"
          },
          "smithy.api#idempotent": {}

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

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

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

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

package licensemanager

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

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

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

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

type ListLicensesInput struct {

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

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

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

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

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

noSmithyDocumentSerde
}

type ListLicensesOutput struct {

// License details.
Licenses []types.License

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

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

noSmithyDocumentSerde
}

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

```
}

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

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

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

package licensemanager
```

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

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

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

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

type CreateLicenseInput struct {

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

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

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

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

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

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

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

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

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

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

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

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

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

```
// License status.
Status types.LicenseStatus

// License version.
Version *string

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

noSmithyDocumentSerde
}

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

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

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

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

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

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

package licensemanager

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

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

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

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

```
}

type CheckInLicenseInput struct {

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

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

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

 noSmithyDocumentSerde
}

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

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

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

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

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

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

package licensemanager

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

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

```
 params = &GetLicenseInput{}
 }

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

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

type GetLicenseInput struct {

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

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

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

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
```

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

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

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

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata
```

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

package licensemanager

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

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

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

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

type CheckoutBorrowLicenseInput struct {

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

 // Digital signature method. The possible value is JSON Web Signature (JWS)
```

```
// algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
//
// [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

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

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

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

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

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

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

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

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

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

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

```
 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

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

 noSmithyDocumentSerde
}

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

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

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

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

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

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

```
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
AWS SDK for Go
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

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

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

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

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

```
type DeleteLicenseInput struct {

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

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

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

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

 // License status.
 Status types.LicenseDeletionStatus

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

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

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

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

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

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
AssociateLicense
 Initialize stack step
```

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

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

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

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

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

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

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

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/GetServiceSettings"

        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
      "type": "structure",
      "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
      "type": "structure",
      "members": {
        "LinuxSubscriptionsDiscovery": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
          "traits": {
            "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
          }
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
          "traits": {
            "smithy.api#documentation": "<p>Lists
```

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

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

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

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

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
          "smithy.api#error": "server"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
           },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
```

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

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

    ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
```

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

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

            }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "isSet",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ]
                        }
```

```
                ],
                "rules": [
                  {
                    "conditions": [
                      {

            "fn": "aws.partition",
                        "argv": [
                          {
                            "ref": "Region"
                          }
                        ],
                        "assign": "PartitionResult"
                      }
                    ],
                    "rules": [
                      {
                        "conditions": [
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {

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

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

```
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"

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

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

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

                    "type": "tree"
                                }
                    ],
                    "type": "tree"
```

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

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

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

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

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

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

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

```
                                        "argv": [
                                            {

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

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

                    }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "DualStack is enabled but this partition does not support DualStack",
                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-linux-
```

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

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

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

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

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

```
                {

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

   "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
                    }
                  },
```

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

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

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

```
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {

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

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

   "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
```

```
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }

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

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

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                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                  },
                  "params": {

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

       },
              {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
          "type": "structure",
          "members": {
            "SourceRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
              "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
```

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

  {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptionInstances"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
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            "items": "Instances"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
{
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n        <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n        <ul>\n        <li>\n
  <p>\n            <code>AccountID</code>\n          </p>\n        </li>\n        <li>\n          <p>\n
    <code>AmiID</code>\n          </p>\n        </li>\n        <li>\n          <p>\n
<code>DualSubscription</code>\n          </p>\n        </li>\n        <li>\n          <p>\n
<code>InstanceID</code>\n          </p>\n        </li>\n        <li>\n          <p>\n
<code>InstanceType</code>\n          </p>\n        </li>\n        <li>\n          <p>\n
<code>ProductCode</code>\n          </p>\n        </li>\n        <li>\n          <p>\n
<code>Region</code>\n          </p>\n        </li>\n        <li>\n          <p>\n
<code>Status</code>\n          </p>\n        </li>\n        <li>\n          <p>\n
<code>UsageOperation</code>\n          </p>\n        </li>\n      </ul>\n      <p>For each filter, you can use
one of the following <code>Operator</code>
 values to \n  \t\tdefine the behavior of the filter:</p>\n      <ul>\n        <li>\n          <p>\n
<code>contains</code>\n          </p>\n        </li>\n        <li>\n          <p>\n
<code>equals</code>\n          </p>\n        </li>\n        <li>\n          <p>\n
<code>Notequal</code>\n          </p>\n        </li>\n      </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to
 start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
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            }
        },
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
            "Instances": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
                }
            },
            "NextToken": {

     "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have
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linked your\n      organization, the returned results will include data aggregated across your accounts in\n
Organizations.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",

   "items": "Subscriptions"
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
         "type": "structure",
         "members": {
            "Filters": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n         <p>The valid names for this filter are:</p>\n         <ul>\n
<li>\n               <p>\n                  <code>Subscription</code>\n               </p>\n            </li>\n         </ul>\n
<p>The
 valid Operators for this filter are:</p>\n         <ul>\n            <li>\n               <p>\n
<code>contains</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>equals</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>Notequal</code>\n               </p>\n            </li>\n         </ul>"
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                     "min": 1,
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                    "max": 16384
                }
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
    "type": "structure",
    "members": {
        "Subscriptions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
                "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
            }
        }
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

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

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

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

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

    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
         }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
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                "name": "EQUAL",
                "value": "Equal",
                "documentation": "Equal operator"
              },
              {
                "name": "NOT_EQUAL",
                "value": "NotEqual",
                "documentation": "Not equal operator"
              },
              {
                "name": "CONTAINS",
                "value": "Contains",
                "documentation": "Contains operator"
              }
            ],
            "smithy.api#length": {
              "min": 1,
              "max": 20
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled OrganizationIntegration"
              },
              {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
          "type": "list",
          "member": {
            "target": "smithy.api#String"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
          "type": "operation",
          "input": {
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            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/RegisterSubscriptionProvider"

            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
          "type": "structure",
          "members": {
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
              "traits": {
                "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                "smithy.api#required": {}
              }
            },
            "SecretArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the
 Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                "smithy.api#required": {}
              }
            },
            "Tags": {
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            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
            }
          },
          "SubscriptionProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
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provider resource that you registered. "
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": " A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions. "
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                 "traits": {
                    "smithy.api#documentation": " The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token. "
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": " Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token. "
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": " A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status. "
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": " The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider. "
                }
            }
        },
        "traits": {
            "smithy.api#documentation": " A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider. "
        }
    },

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    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

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

        "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
          "type": "list",
          "member": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#length": {
                "min": 1,
                "max": 100
              }
            }
          },
          "traits": {
            "smithy.api#length": {
              "min": 1,
              "max": 100
            },
            "smithy.api#uniqueItems": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
          "type": "map",
          "key": {
            "target": "smithy.api#String"
          },
          "value": {
            "target": "smithy.api#String"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
          "type": "structure",
          "members": {
            "Name":
{
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the subscription.</p>"
              }
            },
            "Type": {
              "target": "smithy.api#String",
              "traits": {
```

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

 {
                "name": "RedHat",
                "value": "RedHat",
                "documentation": "RedHat subscription provider namespace"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "ACTIVE",
              "value": "ACTIVE",
              "documentation": "ACTIVE status"
            },
            {
              "name": "INVALID",
              "value": "INVALID",

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

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

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
```

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

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

              "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
```

```
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

    },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/UpdateServiceSettings"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
      "type": "structure",
      "members": {
        "LinuxSubscriptionsDiscovery": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
          "traits": {
            "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
            "smithy.api#required": {}
          }
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
          "traits": {
            "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
            "smithy.api#required": {}
          }
        },
        "AllowUpdate": {
```

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

        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
```

```
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
          }
        }
      }
    }
ListLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
```

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

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

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

package grafana

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

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

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

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

type AssociateLicenseInput struct {

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

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

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

 noSmithyDocumentSerde
```

```
}

type AssociateLicenseOutput
 struct {

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

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

 noSmithyDocumentSerde
}

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

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

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

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

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

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

package licensemanager

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

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

```
 params = &ListReceivedLicensesInput{}
 }

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

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

type ListReceivedLicensesInput struct {

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

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

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

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

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

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

 // Token for the next set of results.
```

```
 NextToken *string

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

 noSmithyDocumentSerde
}

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

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

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

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

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

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

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

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

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

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

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

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

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

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

```
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {

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

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

```
                                    "supportsFIPS"
                                ]

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

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

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

```
            {
              "fn": "booleanEquals",

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

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

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

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

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

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

```
},
{
  "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-east-1",
    "UseFIPS": false,
    "UseDualStack": false
   }
},
{
  "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-2.amazonaws.com"
     }
  },
  "params": {
    "Region": "ap-northeast-2",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-3.amazonaws.com"
    }
  },
  "params": {
```

```
            "Region": "ap-northeast-3",
            "UseFIPS": false,
            "UseDualStack": false
          }

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

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

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

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

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

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

```
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-west-3.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-west-3",
        "UseFIPS": false,

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

```
            "UseDualStack": false
          }

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

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

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

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

  "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-west-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-west-2",
            "UseFIPS": true,
```

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

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

```
                "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-northwest-1",
              "UseFIPS": false,
              "UseDualStack": false

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

```
    },

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

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

  "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
```

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

```
    },

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

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

"expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
```

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

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

```
                    "error": "Invalid Configuration: Missing Region"
                  }
                }
              ],
              "version": "1.0"
            }
          }
        },
        "com.amazonaws.licensemanager#AcceptGrant": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

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

    }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
          }
        },
        "com.amazonaws.licensemanager#AcceptGrantRequest": {
          "type": "structure",
          "members": {
```

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

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

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

```
            "CHECK_IN_LICENSE": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "CheckInLicense"
               }
            },
            "EXTEND_CONSUMPTION_LICENSE":
{
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "ExtendConsumptionLicense"
               }
            },
            "LIST_PURCHASED_LICENSES": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "ListPurchasedLicenses"
               }
            },
            "CREATE_TOKEN": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "CreateToken"
               }
            }
         }
      },
      "com.amazonaws.licensemanager#AllowedOperationList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#AllowedOperation"
         },
         "traits": {
            "smithy.api#length": {
               "min": 1,
               "max":
7
            }
         }
      },
      "com.amazonaws.licensemanager#Arn": {
         "type": "string",
         "traits": {
            "smithy.api#length": {
               "min": 0,
               "max": 2048
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
```

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

    "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
          "smithy.api#default": false
        }
```

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

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

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

```
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
          },
          {
            "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
          },
          {
```

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

```
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License consumption token.</p>"
            }
          },
          "EntitlementsAllowed":
{
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
          },
          "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
              "smithy.api#documentation": "<p>Signed token.</p>"
            }
          },
          "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
```

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

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

```
            "traits": {
              "smithy.api#documentation": "<p>License entitlements.</p>",

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

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

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

```
            }
          },
          "PERPETUAL": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PERPETUAL"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ClientRequestToken": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 36
          }
        }
      },
      "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 2048
          },
          "smithy.api#pattern": "^\\S+$"
        }
      },
      "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "ConflictException",
            "httpResponseCode":
409
          },
          "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 409
        }
      },
```

```
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
      "type": "structure",
      "members": {
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
          }
        },
        "ConsumedLicenses": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
          }
        }
      },

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

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
 license\n            entitlements with a specific Amazon Web Services account, an organization, or an\n
 organizational unit (OU). For more
  information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
 licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
```

```
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientToken",
              "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            },
            "GrantName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Grant name.</p>",
                "smithy.api#required": {}

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

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

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

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

  "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>"
                }
```

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

```
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
          }
        },
        "traits":
{
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicense": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
           },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a license.</p>"
```

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

```
            },
            "Description": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Description of the license configuration.</p>"
               }
            },
            "LicenseCountingType": {
               "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                  "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                  "smithy.api#required": {}
               }
            },
            "LicenseCount": {
               "target": "com.amazonaws.licensemanager#BoxLong",
               "traits": {
                  "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
               }
            },
            "LicenseCountHardLimit": {
               "target": "com.amazonaws.licensemanager#BoxBoolean",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n         blocks the launch of new instances.</p>"
               }
            },
            "LicenseRules": {
               "target":
 "com.amazonaws.licensemanager#StringList",
               "traits": {
                  "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n         vary by dimension, as follows.</p>\n
<ul>\n            <li>\n               <p>\n                  <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
          <code>licenseAffinityToHost</code> |\n               <code>maximumCores</code> |
<code>minimumCores</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n               <code>maximumCores</code> |
<code>minimumCores</code> |\n               <code>maximumSockets</code> | <code>minimumSockets</code> |\n
          <code>maximumVcpus</code> | <code>minimumVcpus</code>\n               </p>\n            </li>\n
<li>\n
  <p>\n                  <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n               <code>maximumSockets</code> |
<code>minimumSockets</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n               <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n               </p>\n            </li>\n         </ul>\n         <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n         values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
```

<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
                }
            },

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

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

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

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

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            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
         }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
         "type": "structure",
         "members": {
            "ReportGeneratorName":
{
               "target": "com.amazonaws.licensemanager#ReportGeneratorName",
               "traits": {
                  "smithy.api#documentation": "<p>Name of the report generator.</p>",
                  "smithy.api#required": {}
               }
            },
            "Type": {
               "target": "com.amazonaws.licensemanager#ReportTypeList",
               "traits": {
                  "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be
generated:</p>\n <ul>\n <li>\n <p>License configuration report - Reports the number and
details of consumed licenses for a license configuration.</p>\n </li>\n <li>\n <p>Resource
report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n </li>\n
</ul>",
                  "smithy.api#required": {}

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

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            "traits": {
                "smithy.api#documentation": "<p>Defines the type of license configuration the report generator tracks.</p>",
                "smithy.api#required": {}
            }
        },
        "ReportFrequency": {
            "target": "com.amazonaws.licensemanager#ReportFrequency",
            "traits": {
                "smithy.api#documentation": "<p>Frequency by which reports are generated.  Reports can be generated daily, monthly, or weekly.</p>",
                "smithy.api#required": {}
            }
        },
        "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientRequestToken",
            "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                "smithy.api#required": {}
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
                "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
      "type": "structure",
      "members": {
        "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report generator.</p>"
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            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product
name.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product SKU.</p>",
              "smithy.api#required": {}
            }
          },
          "Issuer": {
            "target": "com.amazonaws.licensemanager#Issuer",
            "traits": {
              "smithy.api#documentation": "<p>License issuer.</p>",
              "smithy.api#required": {}
            }
          },
          "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Home Region for the license.</p>",
              "smithy.api#required": {}

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

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},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
   "type": "structure",
   "members": {
      "LicenseArn": {
         "target": "com.amazonaws.licensemanager#Arn",
         "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
         }
      },
      "Status": {
         "target": "com.amazonaws.licensemanager#LicenseStatus",
         "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
         }
      },
      "Version": {
          "target": "com.amazonaws.licensemanager#String",
         "traits": {
            "smithy.api#documentation": "<p>License version.</p>"
         }
      }
   },
   "traits": {
      "smithy.api#output": {}
   }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
   "type": "operation",
   "input": {
      "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
   },
   "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
   },
   "errors": [
      {
         "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
         "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
         "target": "com.amazonaws.licensemanager#ConflictException"
       },
      {
         "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
```

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            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits":
{
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
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            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n          usage.</p>",
                "smithy.api#required": {}
            }
        },

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

 "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>License ARN.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>New version of the license.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
{}
        }
      },
      "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
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      "input": {
        "target": "com.amazonaws.licensemanager#CreateTokenRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateTokenResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },

    {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n      <p>A refresh token is a JWT token used to get an access token. With an access token,\n      you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n      call License Manager to manage the specified license.</p>"
      }
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits":
{
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n      JWT token.</p>",
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                "smithy.api#required": {}
              }
            },
            "RoleArns": {
              "target": "com.amazonaws.licensemanager#ArnList",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n        License Manager does not check whether the roles are in use.</p>"
              }
            },
            "ExpirationInDays": {
              "target": "com.amazonaws.licensemanager#Integer",
              "traits": {
                "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The default is 365 days.</p>"
              }
            },
            "TokenProperties": {
               "target": "com.amazonaws.licensemanager#MaxSize3StringList",
              "traits": {
                "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The data is mapped\n          to the amr claim of the JWT token.</p>"
              }
            },
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientToken",
              "traits": {
                "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#CreateTokenResponse": {
          "type": "structure",
          "members": {
            "TokenId": {
              "target": "com.amazonaws.licensemanager#String",

             "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
              }
            },
            "TokenType": {
              "target": "com.amazonaws.licensemanager#TokenType",
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            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
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            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
          }
        },
        "com.amazonaws.licensemanager#DeleteGrantRequest": {
          "type": "structure",
          "members": {
            "GrantArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
              }
            },
            "StatusReason": {
              "target": "com.amazonaws.licensemanager#StatusReasonMessage",
              "traits": {
                "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
              }
            },
            "Version": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Current version of the
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grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

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

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

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

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

  "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
         "type": "structure",
         "members": {},
         "traits": {
            "smithy.api#output": {}
         }
```

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

```
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },

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

```
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}

      }
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
      "type": "enum",
      "members": {
        "JWT_PS384": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "JWT_PS384"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#Entitlement": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Entitlement name.</p>",
            "smithy.api#required": {}
          }
        },
        "Value": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
          }
        },
        "MaxCount": {
          "target": "com.amazonaws.licensemanager#Long",
          "traits": {
            "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
          }
        },
        "Overage": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
          }
        },
```

```
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement unit.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowCheckIn": {
                "target":
"com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementData": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement
data value.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
        }
    },
```

```
    "com.amazonaws.licensemanager#EntitlementDataList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#EntitlementData"
      }
    },
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
      "type": "enum",
      "members": {
        "COUNT": {
          "target": "smithy.api#Unit",
          "traits": {

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

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

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

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

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

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

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

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

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

"smithy.api#enumValue": "Terabytes/Second"
            }
          },
          "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Bits/Second"
            }
          },
```

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

    "TERABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits/Second"
          }
        },
        "COUNT_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Count/Second"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#EntitlementUsage": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Entitlement usage name.</p>",
            "smithy.api#required": {}
          }
        },
        "ConsumedValue": {
          "target": "com.amazonaws.licensemanager#String",

        "traits": {
            "smithy.api#documentation": "<p>Resource usage consumed.</p>",
```

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

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

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

```
            "Expiration": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#FailedDependencyException": {
          "type": "structure",
          "members": {
            "Message": {
              "target": "com.amazonaws.licensemanager#Message"
            },
            "ErrorCode": {
              "target": "com.amazonaws.licensemanager#String"
            }
          },
          "traits": {
            "aws.protocols#awsQueryError": {
              "code": "FailedDependency",
              "httpResponseCode": 424
            },
            "smithy.api#documentation":
"<p>A dependency required to run the API is missing.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 424
          }
        },
        "com.amazonaws.licensemanager#Filter": {
          "type": "structure",
          "members": {
            "Name": {
              "target": "com.amazonaws.licensemanager#FilterName",
              "traits": {
                "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
              }
            },
            "Values": {
              "target": "com.amazonaws.licensemanager#FilterValues",
              "traits": {
                "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only
specify one value for the filter.</p>"
              }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter
 name and value pair that is used to return more specific results from a\n          describe operation. Filters can be used
to match a set of resources by specific criteria,\n          such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanager#FilterLimitExceededException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FilterLimitExceeded",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#FilterList": {
        "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#Filter"
        }
    },
    "com.amazonaws.licensemanager#FilterName": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValue": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValues": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#FilterValue",
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#Filters": {
        "type": "list",
```

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

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

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

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

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

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

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

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

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

```
                "smithy.api#documentation": "<p>License configuration status.</p>"
              }

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

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        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTask": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {

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

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

    "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
```

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

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

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

    "com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
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```
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

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

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

  }
          },
          "SnsTopicArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
```

```
            }
          },
          "OrganizationConfiguration": {
            "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
            }
          },
          "EnableCrossAccountsDiscovery": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
            }

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

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

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

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

            }
          },
          "ACTIVE": {
            "target": "smithy.api#Unit",
```

```
            "traits": {
              "smithy.api#enumValue": "ACTIVE"
            }
          },
          "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
          },
          "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
          },
          "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_DELETE"
            }
          },
          "DISABLED": {
            "target": "smithy.api#Unit",
            "traits":
{
              "smithy.api#enumValue": "DISABLED"
            }
          },
          "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>License name.</p>"
            }

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

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

```
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
           "traits": {
             "smithy.api#documentation": "<p>License entitlements.</p>"
          }
        },
        "ConsumptionConfiguration": {
          "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
          "traits": {
             "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
          }
        },
        "LicenseMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
             "smithy.api#documentation": "<p>Granted license metadata.</p>"
          }
        },
        "CreateTime": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
             "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

}
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
             "smithy.api#documentation": "<p>Version of the granted license.</p>"
          }
        },
        "ReceivedMetadata": {
          "target": "com.amazonaws.licensemanager#ReceivedMetadata",
          "traits": {
             "smithy.api#documentation": "<p>Granted license received metadata.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
      }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#GrantedLicense"
      }
```

```
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
"<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n         <p>For example, you cannot allocate a license to an instance in the process of shutting\n
```

```
down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
      },

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

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

```
            }
          },
          "BEGINS_WITH": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "BEGINS_WITH"
            }
          },
          "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
               "smithy.api#enumValue": "CONTAINS"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
      },
      "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Issuer name.</p>",
              "smithy.api#required": {}
            }
          },
          "SignKey": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage
 of sign and verify, \n         and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
      },
      "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
```

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

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

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

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

   "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
              "smithy.api#documentation": "<p>License entitlements.</p>"
            }
          },
          "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
```

```
            }
          },
          "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>License metadata.</p>"
            }
          },
          "CreateTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>License
creation time.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
          "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
            }
          },
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          },
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
          },
          "Description": {
```

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

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

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

               "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
               "traits": {
                  "smithy.api#documentation": "<p>Automated discovery information.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license agreement that can be\n           consumed and enforced by License Manager. Components include specifications for the license\n           type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n           must be associated with a host), and the number of licenses purchased and used.</p>"
         }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
         "type": "structure",
         "members": {
            "ResourceArn":
{
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
```

```
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
              }
            },
            "ResourceType": {
              "target": "com.amazonaws.licensemanager#ResourceType",
              "traits": {
                "smithy.api#documentation": "<p>Type of server resource.</p>"
              }
            },
            "ResourceOwnerId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource consuming licenses.</p>"
              }
            },
            "AssociationTime": {
              "target": "com.amazonaws.licensemanager#DateTime",
              "traits": {

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

```
                "smithy.api#enumValue": "AVAILABLE"
              }
            },
            "DISABLED": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "DISABLED"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
              }
            },
            "ResourceType": {
              "target": "com.amazonaws.licensemanager#ResourceType",
              "traits":
{
                "smithy.api#documentation": "<p>Type of resource.</p>"
              }
            },
            "ResourceStatus": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Status of the resource.</p>"
              }
            },
            "ResourceOwnerId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
              }
            },
            "AssociationTime": {
              "target": "com.amazonaws.licensemanager#DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
              }
            },
```

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

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

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

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

      "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
    "type": "enum",
    "members": {
        "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "IN_PROGRESS"
            }
        },
        "SUCCEEDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUCCEEDED"
            }
        },
        "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED"
            }
        }
```

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
            "VCPU": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "vCPU"
                }
            },
            "INSTANCE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Instance"
                }
            },
            "CORE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Core"
                }
            },
            "SOCKET": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Socket"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseDeletionStatus": {
        "type": "enum",
        "members": {
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DELETED": {
```

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

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

      "smithy.api#documentation": "<p>Failure time.</p>"
            }
          },
          "OperationName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the operation.</p>"
            }
          },
```

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

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

                "smithy.api#required": {}
              }
            },
            "AmiAssociationScope": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
```

```
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseSpecification"
    }
},
"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {
            "target": "smithy.api#Unit",

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

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

        }
      },
      "com.amazonaws.licensemanager#LicenseUsageException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "LicenseUsageFailure",
            "httpResponseCode": 412
          },
          "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 412
        }
      },
      "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
```

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

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

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

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

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

            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n
  <li>\n            <p>\n              <code>GranteePrincipalARN</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>LicenseIssuerName</code>\n
        </p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",

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

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

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

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

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

```
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
    "type": "structure",
    "members": {
      "LicenseConfigurations": {
        "target": "com.amazonaws.licensemanager#LicenseConfigurations",
        "traits": {
          "smithy.api#documentation": "<p>Information about the license configurations.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",

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

```
      "traits": {
        "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
      "type": "structure",
      "members": {
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {

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

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
```

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

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

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

       "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "NextToken": {
```

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

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

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

```
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
            }
          },

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

```
"smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while
specifying the\n          recipient as this Amazon Web Services account, your organization, or an organizational unit\n
    (OU) to which this member account belongs.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
        "type": "operation",
        "input": {
```

```
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                "smithy.api#required": {}
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
```

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

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

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicenses": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
```

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

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

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

           "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>Status</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>IssuerName</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
```

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

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

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
             "target": "com.amazonaws.licensemanager#FailedDependencyException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
             "traits": {
               "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#InventoryFilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n       are supported:</p>\n       <ul>\n       <li>\n       <p>\n       <code>account_id</code>
```

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

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

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
```

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

              "smithy.api#documentation": "<p>Token IDs.</p>"
            }
          },
          "Filters": {
```

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

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

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

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

```
    "com.amazonaws.licensemanager#Location": {
      "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
      "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
      "type": "structure",
      "members": {
        "ResourceType":
{
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
          }
        },
        "AssociationCount": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
      }
    },
    "com.amazonaws.licensemanager#ManagedResourceSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
      }
    },
    "com.amazonaws.licensemanager#MaxSize100": {

    "type": "integer",
      "traits": {
        "smithy.api#range": {
          "min": 1,
          "max": 100
        }
      }
    },
    "com.amazonaws.licensemanager#MaxSize3StringList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#String"
      },
```

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

    "Value": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>The value.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
      }
    },
    "com.amazonaws.licensemanager#MetadataList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#Metadata"
      }
    },
    "com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement maximum count is reached.</p>",
```

```
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#Options": {
        "type": "structure",
        "members": {
            "ActivationOverrideBehavior": {
                "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
                "traits": {
                    "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of activating a grant.\n          Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter.</p>\n          <ul>\n             <li>\n                <p>As a license administrator, you can optionally specify an\n                   <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n             </li>\n             <li>\n                <p>As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n                   account in your organization.</p>\n             </li>\n             <li>\n                <p>As a grantee, if the grantor creating the distributed grant doesnt specify an\n                   <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n                   are activating the grant.</p>\n             </li>\n          </ul>\n          <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n             <dd>\n                <p>Use this value to activate a grant without replacing any member accounts\n                   active grants for the same product.</p>\n             </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n             <dd>\n                <p>Use this value to activate a grant and disable other active grants in any\n                   member accounts
 for the same product. This action will also replace their\n                   previously activated grants with this activated grant.</p>\n             </dd>\n          </dl>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant, such as activation\n          override behavior. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#OrganizationConfiguration": {
        "type": "structure",
        "members": {
            "EnableIntegration": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation":
 "<p>Enables Organizations integration.</p>",
                    "smithy.api#required": {}
                }
            }
```

```
        },
        "traits": {
          "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
      },
      "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 1
          }
        }
      },
      "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Resource type. The
 possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductInformationFilterList": {
            "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
            "traits": {
              "smithy.api#documentation": "<p>A Product information filter consists of a
 <code>ProductInformationFilterComparator</code> which is a logical operator, a
 <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
 <code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n          <p>Accepted values
 for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
 <code>ProductInformationFilterComparator</code>. </p>\n          <p>The following filters and are supported when
 the resource type \n          is <code>SSM_MANAGED</code>:</p>\n
          <ul>\n            <li>\n              <p>\n                <code>Application Name</code> - The name of the
 application.\n                Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
 <p>\n                <code>Application Publisher</code> - The publisher of the application.\n                Logical
 operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n              <p>\n
 <code>Application Version</code> - The version of the application.\n                Logical operator is
 <code>EQUALS</code>.</p>\n            </li>\n            <li>\n              <p>\n                <code>Platform
 Name</code> - The name of the platform.\n                Logical operator is <code>EQUALS</code>.</p>\n
 </li>\n            <li>\n              <p>\n                <code>Platform Type</code> - The platform type.\n
 Logical operator is <code>EQUALS</code>.</p>\n
```

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

        "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
            "smithy.api#documentation": "<p>Logical operator.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
      }
    },
    "com.amazonaws.licensemanager#ProductInformationFilterList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
      }
    },
    "com.amazonaws.licensemanager#ProductInformationList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
       }
    },
    "com.amazonaws.licensemanager#ProvisionalConfiguration": {
      "type": "structure",
      "members": {
        "MaxTimeToLiveInMinutes": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
      }
    },
    "com.amazonaws.licensemanager#RateLimitExceededException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "RateLimitExceeded",
          "httpResponseCode": 429
        },
```

```
            "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 429
          }
        },
        "com.amazonaws.licensemanager#ReceivedMetadata": {
          "type": "structure",
          "members": {
            "ReceivedStatus": {
              "target": "com.amazonaws.licensemanager#ReceivedStatus",
              "traits": {
                "smithy.api#documentation": "<p>Received status.</p>"
              }
            },
            "ReceivedStatusReason": {
              "target": "com.amazonaws.licensemanager#StatusReasonMessage",
              "traits": {
                "smithy.api#documentation": "<p>Received
 status reason.</p>"
              }
            },
            "AllowedOperations": {
              "target": "com.amazonaws.licensemanager#AllowedOperationList",
              "traits": {
                "smithy.api#documentation": "<p>Allowed operations.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
          }
        },
        "com.amazonaws.licensemanager#ReceivedStatus": {
          "type": "enum",
          "members": {
            "PENDING_WORKFLOW": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "PENDING_WORKFLOW"
              }
            },
            "PENDING_ACCEPT": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue":
 "PENDING_ACCEPT"
              }
```

```
        },
        "REJECTED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "REJECTED"
          }
        },
        "ACTIVE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "ACTIVE"
          }
        },
        "FAILED_WORKFLOW": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "FAILED_WORKFLOW"
          }
        },
        "DELETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DELETED"
          }
        },
        "DISABLED": {
          "target": "smithy.api#Unit",
           "traits": {
            "smithy.api#enumValue": "DISABLED"
          }
        },
        "WORKFLOW_COMPLETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "WORKFLOW_COMPLETED"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#RedirectException": {
      "type": "structure",
      "members": {
        "Location": {
          "target": "com.amazonaws.licensemanager#Location",
          "traits": {
            "smithy.api#httpHeader": "Location"
          }
        },
```

```
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
             "smithy.api#error": "client",
            "smithy.api#httpError": 308
        }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
```

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

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#RenewType":
{
      "type": "enum",
      "members": {
        "NONE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "None"
```

```
            }
          },
          "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Weekly"
            }
          },
          "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Monthly"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ReportContext": {
        "type": "structure",
        "members": {
          "licenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {

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

           "traits": {
              "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
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or monthly.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportFrequencyType": {
        "type": "enum",
        "members": {
            "DAY": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DAY"
                }
            },
            "WEEK": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WEEK"
                }
            },
            "MONTH": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "MONTH"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>"
                }
            },
            "ReportType": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
                }
            },
            "ReportContext": {
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            "target": "com.amazonaws.licensemanager#ReportContext",
            "traits": {
              "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
            }
          },
          "ReportFrequency": {
            "target": "com.amazonaws.licensemanager#ReportFrequency",
            "traits": {
              "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
            }
          },
          "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
            }
          },
          "LastRunStatus": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
            }
          },
          "LastRunFailureReason":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
            }
          },
          "LastReportGenerationTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
            }
          },
          "ReportCreatorAccount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
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        "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
          },
          "S3Location": {
            "target": "com.amazonaws.licensemanager#S3Location",
            "traits": {
              "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
            }
          },
          "CreateTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Time the report was created.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
            }

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

      },
          "LICENSE_CONFIGURATION_USAGE_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "LicenseConfigurationUsageReport"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ReportTypeList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#ReportType"
        }
      },
      "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
          "ResourceId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the resource.</p>"
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits":
{
              "smithy.api#documentation": "<p>Type of resource.</p>"
            }
          },
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
          },
          "Platform": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Platform of the resource.</p>"
            }
          },
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            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventoryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ResourceInventory"
        }
    },
    "com.amazonaws.licensemanager#ResourceLimitExceededException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ResourceLimitExceeded",

                 "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
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    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "InvalidResource.NotFound",
        "httpResponseCode": 400
      },
      "smithy.api#documentation": "<p>The resource cannot be found.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
    }
  },
  "com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
    "members": {
      "EC2_INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_INSTANCE"
        }
      },
      "EC2_HOST": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_HOST"
        }
      },
      "EC2_AMI": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_AMI"
        }
      },
      "RDS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "RDS"
        }
      },
      "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#S3Location": {
    "type": "structure",
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      "members": {
        "bucket": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
          }
        },
        "keyPrefix": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
      }
    },
    "com.amazonaws.licensemanager#ServerInternalException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "InternalError",
          "httpResponseCode": 500
        },
        "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
        "smithy.api#error": "server",
        "smithy.api#httpError": 500
      }
    },
    "com.amazonaws.licensemanager#SignedToken": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 4096
        }
      }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
      "type": "string",
      "traits":
```

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{
            "smithy.api#length": {
               "min": 0,
               "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
         }
      },
      "com.amazonaws.licensemanager#String": {
         "type": "string"
      },
      "com.amazonaws.licensemanager#StringList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#String"
         }
      },
      "com.amazonaws.licensemanager#Tag": {
         "type": "structure",
         "members": {
            "Key": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Tag key.</p>"
               }
            },
            "Value": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation":
"<p>Tag value.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
         }
      },
      "com.amazonaws.licensemanager#TagKeyList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#String"
         }
      },
      "com.amazonaws.licensemanager#TagList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#Tag"
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        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
          {
            "target":
 "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits":
 {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>One or more tags.</p>",
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                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#TagResourceResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#TokenData": {
          "type": "structure",
          "members": {
            "TokenId": {
              "target": "com.amazonaws.licensemanager#String",
               "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
              }
            },
            "TokenType": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
              }
            },
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
              }
            },
            "ExpirationTime": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
 format.</p>"
              }
            },
            "TokenProperties": {
              "target": "com.amazonaws.licensemanager#MaxSize3StringList",
              "traits": {
                "smithy.api#documentation": "<p>Data specified by the caller.</p>"
```

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

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

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    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",
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        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
               "smithy.api#required": {}
            }
          },
          "TagKeys": {
            "target": "com.amazonaws.licensemanager#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
        },
        "output": {

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

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

    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
    configuration is licenseAffinityToHost.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
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```
                "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
              }
            },
            "Name": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>New name
 of the license configuration.</p>"
              }
            },
            "Description": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>New description of the license configuration.</p>"
              }
            },
            "ProductInformationList": {
              "target": "com.amazonaws.licensemanager#ProductInformationList",
              "traits": {
                "smithy.api#documentation": "<p>New product information.</p>"
              }
            },
            "DisassociateWhenNotFound": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
              }
            }
          },
          "traits":
{
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
          },
          "output": {
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```
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n            <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
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            "smithy.api#documentation": "<p>Name of the report generator.</p>",
            "smithy.api#required": {}
          }
        },
        "Type": {
          "target": "com.amazonaws.licensemanager#ReportTypeList",
          "traits": {
            "smithy.api#documentation":
 "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n        <li>\n
<p>License configuration report - Reports the number and details of consumed licenses for a license
configuration.</p>\n        </li>\n        <li>\n        <p>Resource report - Reports the tracked licenses and
resource consumption for a license configuration.</p>\n        </li>\n        </ul>",
            "smithy.api#required": {}
          }
        },
        "ReportContext": {
          "target": "com.amazonaws.licensemanager#ReportContext",
          "traits": {
            "smithy.api#documentation": "<p>The report context.</p>",
            "smithy.api#required": {}
          }
        },
        "ReportFrequency": {
          "target": "com.amazonaws.licensemanager#ReportFrequency",
          "traits":
 {
            "smithy.api#documentation": "<p>Frequency by which reports are generated.</p>",
            "smithy.api#required": {}
          }
        },
        "ClientToken": {
          "target": "com.amazonaws.licensemanager#ClientRequestToken",
          "traits": {
            "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
            "smithy.api#required": {}
          }
        },
        "Description": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Description of the report generator.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
```

```
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

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

```
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
            "smithy.api#required": {}
          }
        },
        "AddLicenseSpecifications": {
          "target": "com.amazonaws.licensemanager#LicenseSpecifications",
          "traits": {
            "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
          }
        },
        "RemoveLicenseSpecifications": {
          "target": "com.amazonaws.licensemanager#LicenseSpecifications",
          "traits": {
            "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
```

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

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


1.96 aws-sdk-go-v2-service-internal-accept-encoding 1.12.3

1.96.1 Available under license :

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

package licensemanager

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

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

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

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

type CheckoutLicenseInput struct {

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

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

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

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

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

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

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

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

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

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

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string
```

```
 // Signed token.
 SignedToken *string

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

 noSmithyDocumentSerde
}

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

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

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

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

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

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

on: [pull_request]

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

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

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

package grafana

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

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

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

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

type DisassociateLicenseInput struct {

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

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

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

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

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

 noSmithyDocumentSerde
}

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

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

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

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

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
```

```
 ServiceID:     ServiceID,
 OperationName: "DisassociateLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about an Active Directory identity
```

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

```
            "smithy.api#enum": [
               {
                  "name": "SELF_MANAGED",
                  "value": "SELF_MANAGED",
                  "documentation": "SELF_MANAGED type of Active Directory"
               },
               {
                  "name": "AWS_MANAGED",
                  "value": "AWS_MANAGED",
                  "documentation": "AWS_MANAGED type of Active Directory"
               }
            ]
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Arn": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
```

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

```
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
            }
          }
        },
        "traits": {

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

```
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },

      {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/license-server/CreateLicenseServerEndpoint"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
      "type": "structure",
      "members": {
        "IdentityProviderArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
```

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

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

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

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

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

```
{
        "type": "structure",
        "members": {
           "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                 "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
              }
           },
           "Product": {
              "target": "smithy.api#String",
              "traits": {
                 "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
              }
           },
           "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",

             "traits": {
                 "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
              }
           }
        },
        "traits": {
           "smithy.api#input": {}
        }
     },
     "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
           "IdentityProviderSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
              "traits": {
                 "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                 "smithy.api#required": {}
              }
           }
        },
        "traits": {
           "smithy.api#output": {}
        }
     },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#Directory":
{
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}
        }
```

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

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

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

      }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
      "type": "structure",
      "members": {
        "Attribute": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
          }
        },
        "Operation": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
          }
        },
```

```
            "Value": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation":
 "<p>Value of the filter.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
         "type": "union",
         "members": {
            "ActiveDirectoryIdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
               "traits": {

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

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

      "smithy.api#required": {}
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
            }
          },
          "FailureMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
```

```
        "type": "structure",
        "members": {
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
              "smithy.api#required": {}
            }
          },
          "Products": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
            "traits":
{
              "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
              "smithy.api#required": {}
            }
          },
          "LastStatusCheckDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date of the last status check.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList": {

  "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
```

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

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

  },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
          }
```

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

            "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server",
             "smithy.api#httpError": 500
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
         "type": "string",
```

```
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"

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

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

```
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager User Subscriptions",
      "arnNamespace": "license-manager-user-subscriptions",
      "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
      "name": "license-manager-user-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
      "additionalAllowedHeaders": [
        "*",
        "content-type",
        "x-amz-content-sha256",
        "x-amz-user-agent",
        "x-amzn-platform-id",
        "x-amzn-trace-id",
        "content-length",
        "x-api-key",

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

```
                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]
                }
            ],

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

"fn": "booleanEquals",
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                                    "ref": "UseDualStack"
                                },
                                true
                            ]
                        }
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
                },
                {
                    "conditions": [],
                    "endpoint": {
                        "url": {
                            "ref": "Endpoint"
                        },
                        "properties": {},
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            "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    },
    {
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                "fn": "isSet",
                "argv": [
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                        "ref": "Region"
                    }
                ]
            }
        ],
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            {
                "conditions": [
                    {
                        "fn": "aws.partition",
                        "argv":
[
                            {
                                "ref": "Region"
                            }
                        ],
                        "assign": "PartitionResult"
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
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                                        "ref": "UseFIPS"
                                    },
                                    true

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

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

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

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

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

                                                        "ref": "PartitionResult"
                                                    },
                                                    "supportsFIPS"
                                                ]
```

```
                                    },
                                    true
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                            }
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                        "rules": [
                            {
                                "conditions": [],
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                                     "properties": {},
                                    "headers": {}
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                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "FIPS is enabled but this partition does not support FIPS",
                        "type": "error"
                    }

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

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                                    "argv": [
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                                        {
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                                        },
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                                    ]
                                }

                        ]
                            }
                        ],
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                                "conditions": [],
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
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                                    "headers": {}
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                                "type": "endpoint"
                            }
                        ],
                         "type": "tree"
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                        "type": "error"
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                    "properties": {},
                     "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    }
```

```
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                "error": "Invalid Configuration: Missing Region",
                "type": "error"
              }
            ]
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            "testCases": [
              {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                "expect": {
                  "endpoint":
{
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                  }
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": true,
                  "UseDualStack": true
                }
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              {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                  }
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": true,

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

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

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

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

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

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

```
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
    "type": "structure",
    "members": {
        "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
        },
        "HealthStatus": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
            "traits": {
                "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
        },
        "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Information about a Remote Desktop Services (RDS) license
 server.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
    "type": "structure",
    "members": {
        "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
            }
        },
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        "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>"
            }
        },
        "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",
            "traits": {
                "smithy.api#documentation":
 "<p>The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server
endpoint.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
            }
        },
        "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
        },
        "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation":
 "<p>The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server.</p>"
            }
        },
        "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
            }
        },
        "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
```

```
            },
            "CreationTime": {

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

```
            },
            {
              "name": "DELETION_FAILED",
              "value": "DELETION_FAILED",
              "documentation": ""
            },
            {
               "name": "DELETED",
              "value": "DELETED",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "HEALTHY",
              "value": "HEALTHY",
              "documentation": ""
            },
            {
              "name": "UNHEALTHY",
              "value": "UNHEALTHY",
              "documentation": ""
            },
            {
              "name": "NOT_APPLICABLE",
              "value": "NOT_APPLICABLE",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList":
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>",
                "smithy.api#required": {}
            }
        },
        "ServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
            "traits": {
                "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings for your \n\t\t\tserver.</p>",

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

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },

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

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
      "type": "structure",
      "members": {
        "IdentityProviderSummaries": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",
          "traits": {

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

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

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

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

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

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

          "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "LicenseServerEndpoints"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits":
 {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
```

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

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

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

```
</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {

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

        }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
            }
```

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

   }
          ],
         "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
               "method": "GET",
               "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
         "type": "structure",
         "members": {
            "ResourceArn": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          }
        },
        "traits": {

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

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            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits":
{
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "InstanceUserSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
         "type": "structure",
         "members": {
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                  "smithy.api#required":
{}
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n <ul>\n <li>\n <p>Status</p>\n </li>\n <li>\n <p>Username</p>\n </li>\n <li>\n <p>Domain</p>\n </li>\n </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
```

```
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",

                "traits": {
                    "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
```

```
                "smithy.api#documentation": "<p>The domain name of the  Active Directory
 that contains the user information for the product subscription.</p>"
              }
            },
            "SubscriptionStartDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The start date of a subscription.</p>"
              }
            },
            "SubscriptionEndDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The end date of a subscription.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
           }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
          "type": "structure",
          "members": {
            "RdsSalCredentialsProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
              "traits": {
                "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
          "type":
```

```
 "operation",
        "input": {
           "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
           "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
           {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
           },
           {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
           },
           {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
           },
           {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
           },
           {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
           {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
           },
           {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
           }
        ],
        "traits": {
           "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
           "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/RegisterIdentityProvider"
           },
           "smithy.api#idempotent": {}
        }
     },
     "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
           "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                 "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
```

```
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>",
                "smithy.api#required": {}
              }
            },
            "Settings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
              "traits": {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration
 \n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",

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

```
    "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The resource couldn't be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 404
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider":
{
      "type": "structure",
      "members": {
        "SecretId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
            "smithy.api#length": {
              "min": 1
            }
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 5,
          "max": 200
        },
        "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {
```

```
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>The request failed because a service quota is exceeded.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
              "smithy.api#length": {
                "min": 1
              },
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound
 TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation
servers.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The registered identity providers product related configuration settings
such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from
resources\n\t\t\tin the VPC.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
         },
        "errors": [
```

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

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code>
| <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>",
              "smithy.api#required": {}
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse":
{
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
```

```
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
          },

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

      "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/StopProductSubscription"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
          "type": "structure",
```

```
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An
 object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code>\n
</p>"
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The
 domain name of the  Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
```

```
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
         "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {

    "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
```

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

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

```
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }

       },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
```

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

  "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
```

```
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },

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

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

```
        },
        "IdentityProviderArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the
identity provider to update.</p>"
          }
        },
        "UpdateSettings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
          "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n          <li>\n            <p>Subnets which you want to add to provision VPC endpoints.</p>\n          </li>\n
      <li>\n            <p>Subnets which you want to remove the VPC endpoints from.</p>\n          </li>\n
<li>\n            <p>Security group ID which permits traffic to the VPC endpoints.</p>\n          </li>\n        </ul>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {

 "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
      "type": "structure",
      "members": {
        "IdentityProviderSummary": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
          "traits": {
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
      "type": "structure",
      "members": {
        "AddSubnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint
```

```
 for products that\n\t\t\trequire connectivity to activation servers.</p>",
                    "smithy.api#required": {}
                }
            },
            "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoints for activation servers.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to
provision VPC endpoints.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

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

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

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

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

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

type ListLicensesInput struct {

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

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

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

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

 noSmithyDocumentSerde
}
```

```
type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

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

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

 noSmithyDocumentSerde
}

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

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

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

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

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

package licensemanager

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

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

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

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

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

type CreateLicenseInput struct {

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

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

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

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

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

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

// License name.
//
// This member is required.
```

```
 LicenseName *string

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

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

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

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

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

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

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

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

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

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

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

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

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

package licensemanager

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

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

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

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

type CheckInLicenseInput struct {

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

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

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

```
 noSmithyDocumentSerde
}

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

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

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

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

func newServiceMetadataMiddleware_opCheckInLicense(region string) *awsmiddleware.RegisterServiceMetadata
 {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
```

```
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

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

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

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

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

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
```

```
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

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

 noSmithyDocumentSerde
}

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

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

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

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

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

package licensemanager

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

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

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

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

type CheckoutBorrowLicenseInput struct {

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

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

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

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

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

```
 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

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

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

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

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

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

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

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

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

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

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

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

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

package licensemanager

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

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

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

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

type DeleteLicenseInput struct {

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

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

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

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

```
 // License status.
 Status types.LicenseDeletionStatus

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

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

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

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

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

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
```

RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


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

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/DeregisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
```

```
                "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
              }
            },
            "Operator": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
              "traits": {
                "smithy.api#documentation": "<p>An operator for filtering results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
          "type":
 "list",
          "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
          },
          "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
```

```
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation":
"<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

          "traits": {
                    "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
                }
```

```
            },
            "SubscriptionProviderStatus": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
               "traits": {
                  "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
               }
            },
            "SubscriptionProviderStatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
               }
            },
            "LastSuccessfulDataRetrievalTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
         "type": "operation",
         "input": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
         ],
         "traits": {
```

```
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
          "type": "structure",
          "members": {}
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
          "type": "structure",
          "members": {
            "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has been enabled, and which Regions data will be aggregated from.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
              }
            },
            "StatusMessage": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
              "traits": {
                "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
              }
            },
            "HomeRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
```

```
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
            "AmiId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
                }
            },
            "InstanceID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
                }
            },
            "InstanceType": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>The instance type of the resource.</p>"
                }
            },
            "AccountID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the instance.</p>"
                }
            },
            "Region": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
                }
            },
            "UsageOperation": {
```

```
            "target": "smithy.api#String",

    "traits": {
                "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
          },
          "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
              "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
          },
          "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
          },
          "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
          },
          "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
            }
          },
          "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
          },
          "SubscriptionProviderUpdateTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
```

```
registered \n\t\t\tthird-party Linux subscription provider.</p>"
                }
            },
            "DualSubscription": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
                }
            },
            "RegisteredWithSubscriptionProvider": {
                "target": "smithy.api#String",
                "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
         },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
        }
    ],
    "traits": {
        "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
             "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
            "additionalAllowedHeaders": [
                "*",
                "content-type",
                "x-amz-content-sha256",
```

```
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
               "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
 configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
```

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

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

}
                      ],
                      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                      "type": "error"
                    },
                    {
                      "conditions": [],
                      "endpoint": {
```

```
                    "url": {
                        "ref": "Endpoint"
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"

    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

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

```
                "argv": [
                  {

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

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

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

                       {
                            "ref": "PartitionResult"
```

```
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],

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

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

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

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

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

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

    "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }
                  ],
                  "type": "tree"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [],
              "error": "FIPS is enabled
```

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

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

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

    {
                                                    "conditions": [],
                                                    "endpoint": {
                                                        "url": "https://license-manager-linux-
```

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

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

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

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

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

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

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

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

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

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

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

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

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

               "Region": "us-iso-east-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                    }
                  },
                  "params": {
                    "Region": "us-iso-east-1",
```

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

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

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

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

```
disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://example.com"
                      }
                    },
                    "params": {
                      "UseFIPS": false,
                      "UseDualStack": false,
                      "Endpoint": "https://example.com"
                    }
                  },
                  {

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

 "Region": "us-east-1",
                      "UseFIPS": false,
                      "UseDualStack": true,
                      "Endpoint": "https://example.com"
                    }
                  },
                  {
                    "documentation": "Missing region",
                    "expect": {
                      "error": "Invalid Configuration: Missing Region"
                    }
                  }
                ],
                "version": "1.0"
              }
            }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled LinuxSubscriptionsDiscovery"

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

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

  {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n          <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n          <ul>\n
<li>\n
  <p>\n                <code>AccountID</code>\n              </p>\n          </li>\n          <li>\n
<p>\n
    <code>AmiID</code>\n              </p>\n          </li>\n          <li>\n          <p>\n
<code>DualSubscription</code>\n              </p>\n          </li>\n          <li>\n          <p>\n
<code>InstanceID</code>\n              </p>\n          </li>\n          <li>\n          <p>\n
```

<code>InstanceType</code>\n \n \n \n \n
<code>ProductCode</code>\n \n \n \n \n
<code>Region</code>\n \n \n \n \n
<code>Status</code>\n \n \n \n \n
<code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n
<code>contains</code>\n \n \n \n \n
<code>equals</code>\n \n \n \n \n
<code>Notequal</code>\n \n \n "
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": " The maximum items to return in a request. "
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": " An array that contains instance objects. "
            }
          },
          "NextToken": {

       "target": "smithy.api#String",
            "traits": {

```
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",

   "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
```

```
            "Filters": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n         <p>The valid names for this filter are:</p>\n         <ul>\n
<li>\n            <p>\n               <code>Subscription</code>\n            </p>\n         </li>\n      </ul>\n
<p>The
 valid Operators for this filter are:</p>\n         <ul>\n            <li>\n               <p>\n
<code>contains</code>\n            </p>\n         </li>\n         <li>\n            <p>\n
<code>equals</code>\n            </p>\n         </li>\n         <li>\n            <p>\n
<code>Notequal</code>\n            </p>\n         </li>\n      </ul>"
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                     "min": 1,
                     "max": 16384
                  }
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
         "type": "structure",
         "members": {
            "Subscriptions": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
               "traits": {
                  "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
               }
            },
            "NextToken": {
```

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

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

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

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

       "NextToken": {
          "target": "smithy.api#String",
          "traits": {
```

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

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

```
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
      "type": "structure",
      "members": {
        "tags": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "EQUAL",
            "value": "Equal",
            "documentation": "Equal operator"
          },
          {
            "name": "NOT_EQUAL",
            "value": "NotEqual",
            "documentation": "Not equal operator"
          },
          {
            "name": "CONTAINS",
            "value": "Contains",
            "documentation": "Contains operator"
          }
        ],
        "smithy.api#length": {
          "min": 1,
          "max": 20
        }
      }
```

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

```
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"

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

```
            },
            "SubscriptionProviderArn": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
               }
            },
            "SubscriptionProviderStatus": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
         "type": "structure",
         "members": {
            "SubscriptionProviderArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
               }
            },
            "SubscriptionProviderSource": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
               "traits": {
                  "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
               }
            },
            "SecretArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
               }
            },
            "SubscriptionProviderStatus": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits":
{
                "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
```

```
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

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

      "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#length": {
              "min": 1,
              "max": 100
            }
          }
        },
        "traits": {
          "smithy.api#length": {
```

```
                "min": 1,
                "max": 100
            },
            "smithy.api#uniqueItems": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
{
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
```

```
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [

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

   "documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
```

```
                "documentation": "PENDING status"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
          "type": "list",
          "member": {
            "target": "smithy.api#String"
          },
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 50
            },
            "smithy.api#sensitive": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
           },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
              "method": "PUT",
              "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
```

```
        "type": "structure",
        "members":
{
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation":
"<p>The request was denied due to request throttling.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
        "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{resourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "resourceArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
```

```
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            },
            "tagKeys": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
              "traits": {

            "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                "smithy.api#httpQuery": "tagKeys",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

         },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
```

```
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
          "type": "structure",
          "members": {
            "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required": {}
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowUpdate": {
              "target":
 "smithy.api#Boolean",
              "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
          "type": "structure",
          "members": {
            "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
```

```
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                 "traits": {
                   "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
               }
            },
            "StatusMessage": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
               "traits": {
                  "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
               }

       },
            "HomeRegions": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
               "traits": {
                  "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated data for Linux\n      subscriptions.</p>"
               }
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
         }
      }
   }
}
ListLicenses
 Initialize stack step
  spanInitializeStart
```

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

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

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

GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
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package grafana

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

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

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

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

type AssociateLicenseInput struct {

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

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

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

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

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

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

 noSmithyDocumentSerde
}

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

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

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

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

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

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package licensemanager

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

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

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

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

type ListReceivedLicensesInput struct {

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

```
//
//
  - Fingerprint
//
//   - IssuerName
//
//   - Beneficiary
Filters []types.Filter

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

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

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

noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

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

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

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

noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
middleware.After)
if err != nil {
 return err
```

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

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

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

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

```
}
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpResponseCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
      },
      {
        "id": "Service",
        "namespace": "*"
      }
    ]
  },
  "shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
      "type": "service",
      "version": "2018-08-01",
      "operations": [
        {
          "target": "com.amazonaws.licensemanager#AcceptGrant"
        },

 {
          "target": "com.amazonaws.licensemanager#CheckInLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CheckoutLicense"
```

```
    },
    {
      "target": "com.amazonaws.licensemanager#CreateGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateGrantVersion"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
     },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateToken"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

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

```
    "target": "com.amazonaws.licensemanager#GetGrant"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicense"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
  },
  {
    "target": "com.amazonaws.licensemanager#GetLicenseUsage"
  },
  {
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      "smithy.api#title": "AWS License Manager",
      "smithy.api#xmlNamespace": {
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            "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
            "type": "Boolean"
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"supportsDualStack"
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both",
            "type": "error"
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                "type": "error"
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                "type": "error"
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                "params": {
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                "expect": {
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            "UseFIPS": false,
            "UseDualStack": false
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        "UseDualStack": false
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disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
         "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
```

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

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

```
                },

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

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

        "UseDualStack": false,
                    "Endpoint": "https://example.com"
                }
```

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

},
          "output": {
            "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
          },
          "errors": [
            {
```

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

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

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ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {

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

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            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#AllowedOperation": {

    "type": "enum",
        "members": {
          "CREATE_GRANT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CreateGrant"
            }
          },
          "CHECKOUT_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckoutLicense"
            }
          },
          "CHECKOUT_BORROW_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckoutBorrowLicense"
            }
          },
          "CHECK_IN_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckInLicense"
            }
          },
          "EXTEND_CONSUMPTION_LICENSE":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ExtendConsumptionLicense"
            }
          },
          "LIST_PURCHASED_LICENSES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ListPurchasedLicenses"
            }
          },
```

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            "CREATE_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CreateToken"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max":
7
            }
        }
    },
    "com.amazonaws.licensemanager#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
```

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{
            "code": "AuthorizationFailure",
            "httpResponseCode": 403
          },
          "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n        policy associated with this account.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 403
        }
      },
      "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
          "LastRunTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
      },

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

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

     },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
               "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
         }
      },
      "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
         "type": "structure",
         "members":
{
            "LicenseArn": {
               "target": "com.amazonaws.licensemanager#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                  "smithy.api#required": {}
               }
```

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            },
            "Entitlements": {
              "target": "com.amazonaws.licensemanager#EntitlementDataList",
              "traits": {
                "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                "smithy.api#required": {}
              }
            },
            "DigitalSignatureMethod": {
              "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
              "traits": {
                "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n         For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                "smithy.api#required": {}
              }
            },
            "NodeId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
              }
            },
            "CheckoutMetadata": {
              "target": "com.amazonaws.licensemanager#MetadataList",
              "traits": {
                "smithy.api#documentation": "<p>Information about constraints.</p>"
              }
            },
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientToken",
              "traits": {
                "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
```

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

```
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CheckoutLicense": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target":
"com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Checks out the specified license.</p>\n      <note>\n      <p>If the
account that created the license is the same that is performing the check out, you must\n      specify the account
```

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as the beneficiary.</p>\n        </note>"
        }
      },
      "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
          "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product
 SKU.</p>",
              "smithy.api#required": {}
            }
          },
          "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
              "smithy.api#documentation": "<p>Checkout type.</p>",
              "smithy.api#required": {}
            }
          },
          "KeyFingerprint": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
              "smithy.api#required": {}
            }
          },
          "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
              "smithy.api#documentation": "<p>License entitlements.</p>",

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

   "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
    "type": "structure",
    "members": {
        "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
         "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "IssuedAt": {
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            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
          },
          "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
            }
          },
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutType": {
        "type": "enum",
        "members": {
          "PROVISIONAL": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PROVISIONAL"
            }
          },
          "PERPETUAL": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PERPETUAL"
            }
           }
        }
      },
      "com.amazonaws.licensemanager#ClientRequestToken": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 36
          }
        }
```

```
    },
    "com.amazonaws.licensemanager#ClientToken": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 2048
        },
        "smithy.api#pattern": "^\\S+$"
      }
    },
    "com.amazonaws.licensemanager#ConflictException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "ConflictException",
          "httpResponseCode":
409
        },
        "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 409
      }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
      "type": "structure",
      "members": {
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
          }
        },
        "ConsumedLicenses": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
          }
        }
      },
```

```
"traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
            "RenewType": {
                "target": "com.amazonaws.licensemanager#RenewType",
                "traits": {
                    "smithy.api#documentation": "<p>Renewal frequency.</p>"
                }
            },
            "ProvisionalConfiguration": {
                "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
                 }
            },
            "BorrowConfiguration": {
                "target": "com.amazonaws.licensemanager#BorrowConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
```

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

    }
            },
            "LicenseArn": {
```

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

      "com.amazonaws.licensemanager#CreateGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
```

```
            "Status": {
               "target": "com.amazonaws.licensemanager#GrantStatus",
               "traits": {
                  "smithy.api#documentation": "<p>Grant status.</p>"
               }
            },
            "Version": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Grant version.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanager#CreateGrantVersion":
{
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
```

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

   "smithy.api#required": {}
            }
          },
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          },
          "GrantName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant name.</p>"
            }
          },
          "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
             "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
              "smithy.api#documentation": "<p>Grant status reason.</p>"
```

```
            }
          },
          "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
          },
          "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
              "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
          }
        },
        "traits":
{
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicense": {
        "type": "operation",
```

```
    "input": {
      "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#RedirectException"
       },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Creates a license.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Creates a license configuration.</p>\n      <p>A license configuration is an abstraction of a customer license agreement that can be\n      consumed and enforced by License Manager. Components include specifications for the license\n      type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n      Dedicated Instance, Dedicated Host, or
 all of these), license affinity  to host (how long a \n      license must be associated with a host), and the number of licenses purchased and used.</p>"
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the license configuration.</p>",
            "smithy.api#required": {}
          }
        },
        "Description": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Description of the license configuration.</p>"
          }
        },
        "LicenseCountingType": {
          "target": "com.amazonaws.licensemanager#LicenseCountingType",
          "traits": {
            "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseCount": {
          "target": "com.amazonaws.licensemanager#BoxLong",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
            }
        },
        "LicenseRules": {
            "target":
 "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n        <li>\n            <p>\n                <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
        <code>licenseAffinityToHost</code> |\n            <code>maximumCores</code> |
<code>minimumCores</code>\n            </p>\n        </li>\n        <li>\n            <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n            <code>maximumCores</code> |
<code>minimumCores</code> |\n            <code>maximumSockets</code> | <code>minimumSockets</code> |\n
        <code>maximumVcpus</code> | <code>minimumVcpus</code>\n            </p>\n        </li>\n
<li>\n
  <p>\n            <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n            <code>maximumSockets</code> |
<code>minimumSockets</code>\n            </p>\n        </li>\n        <li>\n            <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n            <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n            </p>\n        </li>\n    </ul>\n    <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"
            }
        },

  "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
                "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
```

```
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>Product information.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
           },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
         }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
         "type": "structure",
         "members": {
            "ResourceArn": {

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

```
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
    "type": "structure",
    "members": {
      "LicenseConversionTaskId": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

   "traits": {
            "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
       },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
```

```
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
          "ReportGeneratorName":
{
            "target": "com.amazonaws.licensemanager#ReportGeneratorName",
            "traits": {
              "smithy.api#documentation": "<p>Name of the report generator.</p>",
              "smithy.api#required": {}
            }
          },
          "Type": {
            "target": "com.amazonaws.licensemanager#ReportTypeList",
            "traits": {
              "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be generated:</p>\n <ul>\n <li>\n <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n </li>\n <li>\n <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n </li>\n </ul>",
              "smithy.api#required": {}

      }
          },
          "ReportContext": {
            "target": "com.amazonaws.licensemanager#ReportContext",
            "traits": {
              "smithy.api#documentation": "<p>Defines the type of license configuration the report generator tracks.</p>",
              "smithy.api#required": {}
            }
          },
          "ReportFrequency": {
            "target": "com.amazonaws.licensemanager#ReportFrequency",
            "traits": {
              "smithy.api#documentation": "<p>Frequency by which reports are generated.  Reports can be generated daily, monthly, or weekly.</p>",
              "smithy.api#required": {}
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientRequestToken",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
          "LicenseManagerReportGeneratorArn":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
generator.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>",
              "smithy.api#required": {}
            }
```

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

  }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
            "smithy.api#required": {}
          }
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
          "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>",
            "smithy.api#required": {}
          }
        },
        "Beneficiary": {
          "target": "com.amazonaws.licensemanager#String",
```

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            "traits": {
              "smithy.api#documentation": "<p>License beneficiary.</p>",
              "smithy.api#required": {}
            }
          },
          "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for workloads with offline\n          usage.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license.</p>"
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseResponse": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          },
```

```
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
    }
```

```
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target":
"com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product name.</p>",
            "smithy.api#required": {}
          }
        },
        "Issuer": {
          "target": "com.amazonaws.licensemanager#Issuer",
          "traits":
{
            "smithy.api#documentation": "<p>License issuer.</p>",
            "smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
            "smithy.api#required": {}
          }
```

```
            },
            "LicenseMetadata": {
               "target": "com.amazonaws.licensemanager#MetadataList",
               "traits": {
                  "smithy.api#documentation": "<p>Information about the license.</p>"
               }
            },
            "Entitlements": {
               "target": "com.amazonaws.licensemanager#EntitlementList",
               "traits": {
                  "smithy.api#documentation": "<p>License entitlements.</p>",
                  "smithy.api#required": {}
               }
            },
            "ConsumptionConfiguration": {
               "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
               "traits": {
                  "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n         usage.</p>",
                  "smithy.api#required": {}
               }
            },

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

```
"smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>License ARN.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>New version of the license.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseStatus",
          "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output":
{}
      }
    },
    "com.amazonaws.licensemanager#CreateToken": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateTokenRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateTokenResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
```

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

      {
               "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n         <p>A refresh token is a JWT token used to get an access token. With an access token,\n          you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n          call License Manager to manage the specified license.</p>"
         }
      },
      "com.amazonaws.licensemanager#CreateTokenRequest": {
         "type": "structure",
         "members": {
            "LicenseArn": {
               "target": "com.amazonaws.licensemanager#Arn",
               "traits":
{
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n          JWT token.</p>",
                  "smithy.api#required": {}
               }
            },
            "RoleArns": {
               "target": "com.amazonaws.licensemanager#ArnList",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n          License Manager does not check whether the roles are in use.</p>"
               }
            },
            "ExpirationInDays": {
               "target": "com.amazonaws.licensemanager#Integer",
               "traits": {
                  "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The default is 365 days.</p>"
               }
```

```
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n          to the amr claim of the JWT token.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",

                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
            "TokenType": {
                "target": "com.amazonaws.licensemanager#TokenType",
                "traits": {
                    "smithy.api#documentation": "<p>Token type.</p>"
                }
            },
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DateTime": {
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    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
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                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
```

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            },
            "Status": {
               "target": "com.amazonaws.licensemanager#GrantStatus",
               "traits": {
                  "smithy.api#documentation": "<p>Grant status.</p>"
               }
            },
            "Version": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation":
"<p>Grant version.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanager#DeleteLicense": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

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

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

    "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n          <p>You cannot
delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members":
{
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

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            "smithy.api#documentation": "<p>ID of the license configuration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
```

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

 "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
```

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{}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          },
          "DeletionDate": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteToken": {
        "type": "operation",
         "input": {
          "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

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

       }
      },
      "com.amazonaws.licensemanager#DigitalSignatureMethod": {
         "type": "enum",
         "members": {
            "JWT_PS384": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "JWT_PS384"
               }
```

```
            }
          }
        },
        "com.amazonaws.licensemanager#Entitlement": {
          "type": "structure",
          "members": {
            "Name": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement name.</p>",
                "smithy.api#required": {}
              }
            },
            "Value": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
              }
            },
            "MaxCount": {
              "target": "com.amazonaws.licensemanager#Long",
              "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
              }
            },
            "Overage": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
              }
            },
            "Unit": {
              "target": "com.amazonaws.licensemanager#EntitlementUnit",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement unit.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowCheckIn": {
              "target":
"com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
              }
            }
          },
          "traits": {
```

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            "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementData": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement
data value.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "enum",
        "members": {
            "COUNT": {
                "target": "smithy.api#Unit",
                "traits": {

"smithy.api#enumValue": "Count"
                }
            },
```

```
"NONE": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "None"
   }
},
"SECONDS": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Seconds"
   }
},
"MICROSECONDS": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Microseconds"
   }
},
"MILLISECONDS": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Milliseconds"
   }
},
"BYTES": {
   "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bytes"
   }
},
"KILOBYTES": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Kilobytes"
   }
},
"MEGABYTES": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Megabytes"
   }
},
"GIGABYTES": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Gigabytes"
   }
},
```

```
        "TERABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabytes"
          }
        },
        "BITS":
{
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits"
          }
        },
        "KILOBITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits"
          }
        },
        "MEGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabits"
          }
        },
        "GIGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits"
          }
        },
        "TERABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits"

    }
        },
        "PERCENT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Percent"
          }
        },
        "BYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bytes/Second"
```

```
            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
        "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes/Second"
            }
        },
        "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits/Second"
            }
        },
        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue":
"Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
```

```
            "smithy.api#enumValue": "Gigabits/Second"
          }
        },
        "TERABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits/Second"
          }
        },
        "COUNT_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Count/Second"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#EntitlementList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#Entitlement"
      }
    },
    "com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#EntitlementUnit": {
      "type": "enum",
      "members": {
        "COUNT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Count"
          }
        },
        "NONE": {
          "target": "smithy.api#Unit",
```

```
            "traits": {
                "smithy.api#enumValue": "None"
            }
        },
        "SECONDS":
{
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Seconds"
            }
        },
        "MICROSECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Microseconds"
            }
        },
        "MILLISECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Milliseconds"
            }
        },
        "BYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes"
            }
        },
        "KILOBYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes"
             }
        },
        "MEGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes"
            }
        },
        "GIGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabytes"
            }
        },
        "TERABYTES": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Terabytes"
            }
          },
          "BITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Bits"
            }
          },
          "KILOBITS": {
            "target": "smithy.api#Unit",
            "traits": {

             "smithy.api#enumValue": "Kilobits"
            }
          },
          "MEGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Megabits"
            }
          },
          "GIGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Gigabits"
            }
          },
          "TERABITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Terabits"
            }
          },
          "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Percent"
            }
          },
          "BYTES_PER_SECOND": {
            "target":
"smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Bytes/Second"
            }
```

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

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

```
            }
        },

  "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

       "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
```

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

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

        "Expiration": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#FailedDependencyException": {
      "type": "structure",
      "members": {
        "Message": {
```

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

```
        "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
    "input": {
         "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
    },
    "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n        are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
 {
        "type": "structure",
        "members": {
```

```
        "AccessToken": {
          "target": "com.amazonaws.licensemanager#TokenString",
          "traits": {
            "smithy.api#documentation": "<p>Temporary access token.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetGrant": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetGrantRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"

      },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
      }
    },
    "com.amazonaws.licensemanager#GetGrantRequest": {
```

```
    "type": "structure",
    "members": {
      "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
         "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
          "smithy.api#required": {}
        }
      },
      "Version": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Grant version.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
      "Grant": {
        "target": "com.amazonaws.licensemanager#Grant",
        "traits": {
          "smithy.api#documentation": "<p>Grant details.</p>"
        }
      }
    },
    "traits": {

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

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

        },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConfiguration": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits":
{
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
          "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
            }
          },
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          },
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>"
             }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
          },
          "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
```

```
        "traits": {
            "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
        }
    },
    "LicenseRules": {
        "target": "com.amazonaws.licensemanager#StringList",
        "traits": {
            "smithy.api#documentation": "<p>License rules.</p>"
        }
    },
    "LicenseCount": {
        "target": "com.amazonaws.licensemanager#BoxLong",

      "traits": {
            "smithy.api#documentation": "<p>Number of available licenses.</p>"
        }
    },
    "LicenseCountHardLimit": {
        "target": "com.amazonaws.licensemanager#BoxBoolean",
        "traits": {
            "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
        }
    },
    "ConsumedLicenses": {
        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
            "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
        }
    },
    "Status": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>License configuration status.</p>"
        }

},
    "OwnerAccountId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
        }
    },
    "ConsumedLicenseSummaryList": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
        "traits": {
            "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
        }
    },
```

```
            "ManagedResourceSummaryList": {
              "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanager#TagList",
               "traits": {
                "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
              }
            },
            "ProductInformationList": {
              "target": "com.amazonaws.licensemanager#ProductInformationList",
              "traits": {
                "smithy.api#documentation": "<p>Product information.</p>"
              }
            },
            "AutomatedDiscoveryInformation": {
              "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
              "traits": {
                "smithy.api#documentation": "<p>Automated discovery information.</p>"
              }
            },
            "DisassociateWhenNotFound": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#GetLicenseConversionTask": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {

  "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information
on.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
     },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
```

```
            }
          },
          "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information
about the license type converted from.</p>"
            }
          },
          "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
              "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
          },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
            }
          },
          "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
          },
          "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
          }
        },
```

```
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

         },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
              "smithy.api#required":
{}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
          "ReportGenerator": {
            "target": "com.amazonaws.licensemanager#ReportGenerator",
            "traits": {
              "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {

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

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

"com.amazonaws.licensemanager#GetLicenseUsage": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {

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

```
    },
    "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
      "type": "structure",
      "members": {
        "LicenseUsage": {
          "target":
"com.amazonaws.licensemanager#LicenseUsage",
          "traits": {
            "smithy.api#documentation": "<p>License usage details.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n         and so on.</p>"

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

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

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

```
"smithy.api#documentation": "<p>The grantee principal ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantStatus": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status reason.</p>"
                 }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Granted operations.</p>",
                    "smithy.api#required": {}
                }
            },
            "Options": {
                "target": "com.amazonaws.licensemanager#Options",
                "traits": {
                    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
```

```
"<p>Describes a grant.</p>"
        }
      },
      "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Grant"
        }
      },
      "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
          "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
          },
          "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_ACCEPT"
            }
          },
          "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "REJECTED"

          }
          },
          "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ACTIVE"
            }
          },
          "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
          },
          "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
```

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

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

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

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

```
            "traits": {
              "smithy.api#documentation": "<p>Granted license metadata.</p>"
            }
          },
          "CreateTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

  }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Version of the granted license.</p>"
            }
          },
          "ReceivedMetadata": {
            "target": "com.amazonaws.licensemanager#ReceivedMetadata",
            "traits": {
              "smithy.api#documentation": "<p>Granted license received metadata.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
        }
      },
      "com.amazonaws.licensemanager#GrantedLicenseList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#GrantedLicense"
        }
      },
      "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
      },
      "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
```

```
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "InvalidParameterValueProvided",
          "httpResponseCode": 400
        },
        "smithy.api#documentation":
"<p>One or more parameter values are not valid.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "InvalidResourceState",
          "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },

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

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

},
      "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
      }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
      "type": "enum",
      "members": {
        "EQUALS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EQUALS"
          }
        },
        "NOT_EQUALS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "NOT_EQUALS"
          }
        },
        "BEGINS_WITH": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "BEGINS_WITH"
          }
        },
        "CONTAINS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "CONTAINS"
          }
        }
      }
```

```
    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#InventoryFilter"
      }
    },
    "com.amazonaws.licensemanager#Issuer": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Issuer name.</p>",
            "smithy.api#required": {}
          }
        },
        "SignKey": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
      }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Issuer name.</p>"
          }
        },
        "SignKey": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
          }
        },
        "KeyFingerprint": {
```

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

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

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

   "target": "com.amazonaws.licensemanager#EntitlementList",
          "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>"
          }
        },
        "ConsumptionConfiguration": {
          "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
          }
        },
        "LicenseMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
            "smithy.api#documentation": "<p>License metadata.</p>"
          }
        },
        "CreateTime": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>License
 creation time.</p>"
          }
        },
```

```
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
    "type": "structure",
    "members": {
        "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
            }
        },
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
             }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
```

```
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
             "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license configuration.</p>"
            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

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

```
            "traits": {
                "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
            }
        },
        "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
                "smithy.api#documentation": "<p>Product information.</p>"
            }
        },
        "AutomatedDiscoveryInformation": {

            "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
            "traits": {
                "smithy.api#documentation": "<p>Automated discovery information.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used.</p>"
      }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
      "type": "structure",
      "members": {
        "ResourceArn":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of server resource.</p>"
            }
        },
        "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource consuming licenses.</p>"
            }
```

```
            },
            "AssociationTime": {
               "target": "com.amazonaws.licensemanager#DateTime",
               "traits": {

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

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits":
{
              "smithy.api#documentation": "<p>Type of resource.</p>"
            }
          },
          "ResourceStatus": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Status of the resource.</p>"
            }
          },
          "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
            }
          },
          "AssociationTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
            }
          },

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

```
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurations": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConfiguration"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionContext": {

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

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

```
            }
          },
          "DestinationLicenseContext": {
            "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the conversion task.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
          },
          "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
            }
          },
          "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
            }
          },
          "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTaskId": {
```

```
      "type": "string",
      "traits": {

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

```
        },
        "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
```

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

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

              "target": "com.amazonaws.licensemanager#MetadataList",
              "traits": {
```

```
                "smithy.api#documentation": "<p>Reserved.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
          }
        },
        "com.amazonaws.licensemanager#LicenseOperationFailureList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
          }
        },
        "com.amazonaws.licensemanager#LicenseSpecification": {
          "type": "structure",
          "members": {
            "LicenseConfigurationArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

                "smithy.api#required": {}
              }
            },
            "AmiAssociationScope": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
          }
        },
        "com.amazonaws.licensemanager#LicenseSpecifications": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#LicenseSpecification"
          }
        },
        "com.amazonaws.licensemanager#LicenseStatus": {
          "type": "enum",
          "members": {
            "AVAILABLE": {
```

```
            "target": "smithy.api#Unit",

        "traits": {
            "smithy.api#enumValue": "AVAILABLE"
          }
        },
        "PENDING_AVAILABLE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "PENDING_AVAILABLE"
          }
        },
        "DEACTIVATED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DEACTIVATED"
          }
        },
        "SUSPENDED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "SUSPENDED"
          }
        },
        "EXPIRED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EXPIRED"
          }
        },

      "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DELETED"
          }
        }
      }
  },
  "com.amazonaws.licensemanager#LicenseUsage": {
      "type": "structure",
      "members": {
```

```
            "EntitlementUsages": {
                "target": "com.amazonaws.licensemanager#EntitlementUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlement usages.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

        }
    },
    "com.amazonaws.licensemanager#LicenseUsageException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "LicenseUsageFailure",
                "httpResponseCode": 412
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {

    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
```

```
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
 configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
 the license rules).</p>"
          }
        },
        "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
          "type": "structure",
          "members": {
            "LicenseConfigurationArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results
 to return in a single call.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
          "type": "structure",
```

```
        "members": {
          "LicenseConfigurationAssociations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
            "traits": {
              "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
            }
          },
          "NextToken": {

 "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListDistributedGrants": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
```

```
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
          "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {

          "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n
  <li>\n            <p>\n              <code>GranteePrincipalARN</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>LicenseIssuerName</code>\n
        </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
        "type": "structure",
```

```
      "members": {
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",

    "traits": {
            "smithy.api#documentation": "<p>Distributed grant details.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
      },
      "errors": [
        {

"target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
      }
```

```
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
      "type": "structure",
      "members": {
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
      "type": "structure",
      "members": {
        "LicenseOperationFailureList": {
          "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
          "traits": {
            "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
```

```
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
      },

   "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
      "type": "structure",
      "members": {
        "LicenseConfigurationArns": {
          "target": "com.amazonaws.licensemanager#StringList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
```

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                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#Filters",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n          <li>\n            <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n            Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n            Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n          </li>\n          <li>\n
<p>\n            <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n            Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
  </li>\n          <li>\n            <p>\n            <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n            Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n          </li>\n        </ul>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
          "type": "structure",
          "members": {
            "LicenseConfigurations": {
              "target": "com.amazonaws.licensemanager#LicenseConfigurations",
              "traits": {
                "smithy.api#documentation": "<p>Information about the license configurations.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",

             "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
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    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
       },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      },
      "MaxResults": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {

"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
```

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            },
            "Filters": {
               "target": "com.amazonaws.licensemanager#Filters",
               "traits": {
                  "smithy.api#documentation": "<p>\n         Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
         "type": "structure",
         "members": {
            "LicenseConversionTasks": {
               "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
               "traits": {
                  "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
               }
            },
            "NextToken": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target":
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"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
          "type": "structure",
          "members": {
            "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n          <li>\n            <p>\n              <code>LicenseConfigurationArn</code>\n
</p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits":
{
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
```

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            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
          "ReportGenerators": {
            "target": "com.amazonaws.licensemanager#ReportGeneratorList",
            "traits": {
              "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }

        }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
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                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
              },
              {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
              }
            ],
            "traits": {
              "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
            }
          },
          "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
            "type": "structure",
            "members": {
              "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                  "smithy.api#required": {}
                }
              },
              "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {

            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
              },
              "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
              }
            },
            "traits": {
              "smithy.api#input": {}
            }
          },
          "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
            "type": "structure",
            "members": {
              "LicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                  "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
                }
              },
```

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
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            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
               "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
               "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
               "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
               "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
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```
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
      "type": "structure",
      "members": {
        "LicenseArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
          }
        },

     "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n
   <li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>Status</code>\n            </p>\n          </li>\n        </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token
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for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {

  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
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```
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while specifying the\n        recipient as this Amazon Web Services account, your organization, or an organizational unit\n    (OU) to which this member account belongs.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
```

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n          <li>\n              <p>\n                  <code>ParentArn</code>\n              </p>\n          </li>\n
<li>\n              <p>\n                  <code>GranteePrincipalArn</code>\n              </p>\n          </li>\n      </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

```
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
            "Grants": {
                "target": "com.amazonaws.licensemanager#GrantList",
                "traits": {
                    "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>ProductSKU</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                    <code>LicenseIssuerName</code>\n                </p>\n
</li>\n            <li>\n                <p>\n                    <code>LicenseArn</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                    <code>GrantStatus</code>\n                </p>\n            </li>\n            <li>\n
<p>\n
        <code>GranterAccountId</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
```

```
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
      "type": "structure",
      "members": {
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",
           "traits": {
            "smithy.api#documentation": "<p>Received grant details.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedLicenses": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
```

```
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n
          </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
             "traits": {
              "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
          "type": "structure",
          "members": {
            "LicenseArns": {
              "target": "com.amazonaws.licensemanager#ArnList",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
              }
            },

           "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>Status</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>IssuerName</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Beneficiary</code>\n            </p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
               "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
          "type": "structure",
```

```
    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#GrantedLicenseList",
        "traits": {
          "smithy.api#documentation": "<p>Received license details.</p>"
        }
      },

      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
         "target": "com.amazonaws.licensemanager#FailedDependencyException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
```

```
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
          "type": "structure",
          "members": {
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#BoxInteger",
               "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#InventoryFilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n       are supported:</p>\n       <ul>\n       <li>\n       <p>\n       <code>account_id</code>
- The ID of the Amazon Web Services account that owns the resource.\n       Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
         </li>\n       <li>\n       <p>\n       <code>application_name</code> - The name of the
application. \n       Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n
  </li>\n       <li>\n       <p>\n       <code>license_included</code> - The type of license included. \n
         Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n       Possible values
are <code>sql-server-enterprise</code> | \n       <code>sql-server-standard</code> | \n       <code>sql-
server-web</code> |  \n       <code>windows-server-datacenter</code>.</p>\n       </li>\n       <li>\n
  <p>\n       <code>platform</code> - The platform of the resource.\n       Logical operators are
<code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n       </li>\n       <li>\n       <p>\n
       <code>resource_id</code> - The ID of the resource. \n       Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n       </li>\n       <li>\n       <p>\n
    <code>tag:<key></code> - The key/value combination of a tag assigned \n       to the resource. Logical
operators are <code>EQUALS</code> (single account) or\n       <code>EQUALS</code> |
<code>NOT_EQUALS</code> (cross account).</p>\n       </li>\n       </ul>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
```

```
    "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
      "type": "structure",
      "members": {
        "ResourceInventoryList": {
          "target": "com.amazonaws.licensemanager#ResourceInventoryList",
          "traits": {
            "smithy.api#documentation": "<p>Information
about the resources.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListTagsForResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

      "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>Information about the tags.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListTokensRequest": {
          "type": "structure",
          "members": {
            "TokenIds": {
              "target": "com.amazonaws.licensemanager#StringList",
              "traits": {

                "smithy.api#documentation": "<p>Token IDs.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n          <li>\n          <p>\n          <code>LicenseArns</code>\n          </p>\n          </li>\n
</ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits": {
                "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
              }
            }
          },
          "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n            consumption details by resource at a selected point in time. Use this action to audit the\n            current license consumption for any license inventory and configuration.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
          "type": "structure",
          "members": {
            "LicenseConfigurationArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#Filters",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n            are supported:</p>\n            <ul>\n              <li>\n                <p>\n                  <code>resourceArn</code> - The ARN of the license configuration resource.\n                  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n              </li>\n              <li>\n                <p>\n                  <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n              </li>\n              <li>\n                <p>\n                  <code>resourceAccount</code> - The ID of the account that owns the resource. \n                  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n              </li>\n            </ul>"
              }
            }
```

```
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

"LicenseConfigurationUsageList": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#Location": {
        "type": "string"
      },
      "com.amazonaws.licensemanager#Long": {
        "type": "long"
      },
      "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
          "ResourceType":
{
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
            }
          },
          "AssociationCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
            }
          }
```

```
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
        }
      },
      "com.amazonaws.licensemanager#MetadataList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Metadata"
        }
      },
      "com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement maximum count is reached.</p>",
           "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },
      "com.amazonaws.licensemanager#Options": {
        "type": "structure",
        "members": {
          "ActivationOverrideBehavior": {
            "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
            "traits": {
              "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of activating a grant.\n          Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n          <code>Status</code> parameter.</p>\n          <ul>\n            <li>\n              <p>As a license administrator, you can optionally specify an\n                <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n            </li>\n            <li>\n              <p>As a grantor, you can optionally specify an\n                <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n                account in your organization.</p>\n            </li>\n            <li>\n              <p>As a grantee, if the grantor creating the distributed grant doesnt specify an\n                <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n                are activating the grant.</p>\n            </li>\n          </ul>\n          <dl>\n            <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n            <dd>\n              <p>Use this value to activate a grant without replacing any member accounts\n                active grants for the same product.</p>\n            </dd>\n            <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n            <dd>\n              <p>Use this value to activate a
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grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation":
" Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

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                "smithy.api#documentation": "<p>Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
                "smithy.api#required": {}
              }
            },
            "ProductInformationFilterList": {
              "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
              "traits": {
                "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n          <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n          <p>The following filters and are supported when
the resource type \n          is <code>SSM_MANAGED</code>:</p>\n
        <ul>\n            <li>\n              <p>\n                <code>Application Name</code> - The name of the
application.\n                Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>Application Publisher</code> - The publisher of the application.\n                Logical
operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n              <p>\n
<code>Application Version</code> - The version of the application.\n                Logical operator is
<code>EQUALS</code>.</p>\n            </li>\n            <li>\n              <p>\n                <code>Platform
Name</code> - The name of the platform.\n                Logical operator is <code>EQUALS</code>.</p>\n
</li>\n            <li>\n              <p>\n                <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
        </li>\n            <li>\n              <p>\n                <code>Tag:key</code> - The key of a tag attached to an
Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>.  The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key.\n                </p>\n            </li>\n            <li>\n              <p>\n
<code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from
automated discovery.\n                Logical operator is <code>NOT_EQUALS</code>.</p>\n            </li>\n
<li>\n              <p>\n                <code>License Included</code> - The type of license included.\n                Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n                Possible values are:
 <code>sql-server-enterprise</code> | \n                <code>sql-server-standard</code> | \n                <code>sql-server-
web</code> |  \n                <code>windows-server-datacenter</code>.</p>\n            </li>\n          </ul>\n
<p>The following filters and logical operators are supported when the resource type\n          is
<code>RDS</code>:</p>\n          <ul>\n            <li>\n              <p>\n                <code>Engine Edition</code> -
The edition of the database engine.\n                Logical operator is <code>EQUALS</code>.\n                Possible
values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code>.</p>\n            </li>\n            <li>\n              <p>\n                <code>License Pack</code> - The license
pack.\n                Logical operator is <code>EQUALS</code>.\n                Possible values are: <code>data
guard</code> | \n                <code>diagnostic pack sqlt</code> | \n
              <code>tuning pack sqlt</code> | \n                <code>ols</code> | \n                <code>olap</code>.</p>\n
    </li>\n          </ul>",
                "smithy.api#required": {}
              }
            }
          },
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    "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
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            "MaxTimeToLiveInMinutes": {
               "target": "com.amazonaws.licensemanager#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
         }
      },
      "com.amazonaws.licensemanager#RateLimitExceededException": {
         "type": "structure",
         "members": {
            "Message": {
               "target": "com.amazonaws.licensemanager#Message"
            }
         },
         "traits": {
             "aws.protocols#awsQueryError": {
               "code": "RateLimitExceeded",
               "httpResponseCode": 429
            },
            "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 429
         }
      },
      "com.amazonaws.licensemanager#ReceivedMetadata": {
         "type": "structure",
         "members": {
            "ReceivedStatus": {
               "target": "com.amazonaws.licensemanager#ReceivedStatus",
               "traits": {
                  "smithy.api#documentation": "<p>Received status.</p>"
               }
            },
            "ReceivedStatusReason": {
               "target": "com.amazonaws.licensemanager#StatusReasonMessage",
               "traits": {
                  "smithy.api#documentation": "<p>Received
 status reason.</p>"
               }
            },
            "AllowedOperations": {
               "target": "com.amazonaws.licensemanager#AllowedOperationList",
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            "traits": {
              "smithy.api#documentation": "<p>Allowed operations.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
        }
      },
      "com.amazonaws.licensemanager#ReceivedStatus": {
        "type": "enum",
        "members": {
          "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
          },
          "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue":
"PENDING_ACCEPT"
            }
          },
          "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "REJECTED"
            }
          },
          "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ACTIVE"
            }
          },
          "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
          },
          "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
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        },
        "DISABLED": {
          "target": "smithy.api#Unit",
           "traits": {
             "smithy.api#enumValue": "DISABLED"
          }
        },
        "WORKFLOW_COMPLETED": {
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "WORKFLOW_COMPLETED"
          }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
          "target": "com.amazonaws.licensemanager#Location",
          "traits": {
             "smithy.api#httpHeader": "Location"
          }
        },
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
         "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#RejectGrantResponse"
    },
    "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
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            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
          }
        },
        "com.amazonaws.licensemanager#RejectGrantRequest": {
          "type": "structure",
          "members": {
            "GrantArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}

  }
        },
        "com.amazonaws.licensemanager#RejectGrantResponse": {
          "type": "structure",
          "members": {
            "GrantArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
              }
            },
            "Status": {
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            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Weekly"
            }
          },
          "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Monthly"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ReportContext": {
        "type": "structure",
        "members": {
          "licenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
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        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this generator reports on.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportFrequency": {
        "type": "structure",
        "members": {
            "value": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
                    "smithy.api#documentation": "<p>Number of times within the frequency period that a report is generated.  \n         The only supported value is <code>1</code>.</p>"
                }
            },
            "period": {
                "target": "com.amazonaws.licensemanager#ReportFrequencyType",

              "traits": {
                    "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly, or monthly.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportFrequencyType": {
        "type": "enum",
        "members": {
            "DAY": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DAY"
                }
            },
            "WEEK": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WEEK"
                }
            },
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            "MONTH": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "MONTH"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>"
                }
            },
            "ReportType": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
                "traits": {
                    "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
                }
            },
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
                }
            },
            "LastRunStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
                }
```

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            },
            "LastRunFailureReason":
 {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
               }
            },
            "LastReportGenerationTime": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
               }
            },
            "ReportCreatorAccount": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
               }
            },
            "Description": {
               "target": "com.amazonaws.licensemanager#String",

         "traits": {
                  "smithy.api#documentation": "<p>Description of the report generator.</p>"
               }
            },
            "S3Location": {
               "target": "com.amazonaws.licensemanager#S3Location",
               "traits": {
                  "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
               }
            },
            "CreateTime": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Time the report was created.</p>"
               }
            },
            "Tags": {
               "target": "com.amazonaws.licensemanager#TagList",
               "traits": {
                  "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
               }
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}
    },
    "traits": {
        "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
    }
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportGenerator"
    }
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#ReportType": {
    "type": "enum",
    "members": {
        "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
            }

},
        "LICENSE_CONFIGURATION_USAGE_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "LicenseConfigurationUsageReport"
            }
        }
    }
},
"com.amazonaws.licensemanager#ReportTypeList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportType"
    }
},
"com.amazonaws.licensemanager#ResourceInventory": {
    "type": "structure",
    "members": {
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            "ResourceId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>ID of the resource.</p>"
              }
            },
            "ResourceType": {
              "target": "com.amazonaws.licensemanager#ResourceType",
              "traits":
{
                "smithy.api#documentation": "<p>Type of resource.</p>"
              }
            },
            "ResourceArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
              }
            },
            "Platform": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Platform of the resource.</p>"
              }
            },
            "PlatformVersion": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
              }
            },
            "ResourceOwningAccountId":
{
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
          }
        },
        "com.amazonaws.licensemanager#ResourceInventoryList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#ResourceInventory"
          }
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},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
   "type": "structure",
   "members": {
      "Message": {
         "target": "com.amazonaws.licensemanager#Message"
      }
   },
   "traits": {
      "aws.protocols#awsQueryError": {
         "code": "ResourceLimitExceeded",

       "httpResponseCode": 400
      },
      "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
   }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
   "type": "structure",
   "members": {
      "Message": {
         "target": "com.amazonaws.licensemanager#Message"
      }
   },
   "traits": {
      "aws.protocols#awsQueryError": {
         "code": "InvalidResource.NotFound",
         "httpResponseCode": 400
      },
      "smithy.api#documentation": "<p>The resource cannot be found.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
   }
},
"com.amazonaws.licensemanager#ResourceType": {
   "type": "enum",
    "members": {
      "EC2_INSTANCE": {
         "target": "smithy.api#Unit",
         "traits": {
            "smithy.api#enumValue": "EC2_INSTANCE"
         }
      },
      "EC2_HOST": {
         "target": "smithy.api#Unit",
         "traits": {
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                "smithy.api#enumValue": "EC2_HOST"
              }
            },
            "EC2_AMI": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "EC2_AMI"
              }
            },
            "RDS": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "RDS"
              }
            },
            "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
              "target": "smithy.api#Unit",
              "traits": {
                 "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#S3Location": {
          "type": "structure",
          "members": {
            "bucket": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
              }
            },
            "keyPrefix": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
          }
         },
        "com.amazonaws.licensemanager#ServerInternalException": {
          "type": "structure",
          "members": {
            "Message": {
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            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "InternalError",
            "httpResponseCode": 500
          },
          "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
          "smithy.api#error": "server",
          "smithy.api#httpError": 500
        }
      },
      "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 4096
          }
        }
      },
      "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits":
{
          "smithy.api#length": {
            "min": 0,
            "max": 400
          },
          "smithy.api#pattern": "^[\\s\\S]+$"
        }
      },
      "com.amazonaws.licensemanager#String": {
        "type": "string"
      },
      "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
          "Key": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Tag key.</p>"
```

```
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Tag value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Tag"
        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
          {
            "target":
"com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
```

```
            "TokenType": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
              }
            },
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
              }
            },
            "ExpirationTime": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
 format.</p>"
              }
            },
            "TokenProperties": {
              "target": "com.amazonaws.licensemanager#MaxSize3StringList",
              "traits": {
                "smithy.api#documentation": "<p>Data specified by the caller.</p>"
              }
            },
            "RoleArns": {
              "target": "com.amazonaws.licensemanager#ArnList",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
              }
            }
          },
          "traits": {

            "smithy.api#documentation": "<p>Describes a token.</p>"
          }
        },
        "com.amazonaws.licensemanager#TokenList": {
          "type": "list",
```

```
      "member": {
        "target": "com.amazonaws.licensemanager#TokenData"
      }
    },
    "com.amazonaws.licensemanager#TokenString": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 4096
        },
        "smithy.api#pattern": "^\\S+$"
      }
    },
    "com.amazonaws.licensemanager#TokenType": {
      "type": "enum",
      "members": {
        "REFRESH_TOKEN": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "REFRESH_TOKEN"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#UntagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#UntagResourceResponse"
      },
```

```
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanager#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UntagResourceResponse": {
        "type": "structure",
        "members": {},
```

```
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
        },
        "output": {

 "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
         }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
```

```
            "LicenseConfigurationStatus": {
               "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
               "traits": {
                  "smithy.api#documentation": "<p>New status of the license configuration.</p>"
               }
            },
            "LicenseRules": {
               "target": "com.amazonaws.licensemanager#StringList",
               "traits": {

 "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
 configuration is licenseAffinityToHost.</p>"
               }
            },
            "LicenseCount": {
               "target": "com.amazonaws.licensemanager#BoxLong",
               "traits": {
                  "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
               }
            },
            "LicenseCountHardLimit": {
               "target": "com.amazonaws.licensemanager#BoxBoolean",
               "traits": {
                  "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
               }
            },
            "Name": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>New name
of the license configuration.</p>"
               }
            },
            "Description": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>New description of the license configuration.</p>"
               }
            },
            "ProductInformationList": {
               "target": "com.amazonaws.licensemanager#ProductInformationList",
               "traits": {
                  "smithy.api#documentation": "<p>New product information.</p>"
               }
            },
            "DisassociateWhenNotFound": {
               "target": "com.amazonaws.licensemanager#BoxBoolean",
```

```
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
          }
        },
        "traits":
{
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n        <li>\n        <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n        </li>\n        <li>\n        <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n        </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>The report context.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
```

```
            "traits":
{
                "smithy.api#documentation": "<p>Frequency by which reports are generated.</p>",
                "smithy.api#required": {}
            }
        },
        "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientRequestToken",
            "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                "smithy.api#required": {}
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
```

```
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
              "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
              "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n          <p>You can update the license specifications of AMIs, instances, and
hosts.\n          You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
          }
        },

        "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                "smithy.api#required": {}
              }
            },
            "AddLicenseSpecifications": {
              "target": "com.amazonaws.licensemanager#LicenseSpecifications",
              "traits": {
                "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
              }
            },
            "RemoveLicenseSpecifications": {
              "target": "com.amazonaws.licensemanager#LicenseSpecifications",
              "traits": {
                "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
              }
```

```
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
        "S3BucketArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
              }
            },
            "SnsTopicArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
              }
            },
            "OrganizationConfiguration": {
              "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
              "traits": {
                "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
              }
            },
            "EnableCrossAccountsDiscovery": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"

        }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#UsageOperation": {
          "type": "string",
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 50
            }
          }
        },
        "com.amazonaws.licensemanager#ValidationException": {
```

```
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

      "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      }
    }
  }
```


1.97 smithy-go 1.22.3

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1.98 github.com/mennanov/limiters 1.11.0

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1.99 github.com/hashicorp/go-metrics 0.5.4

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1.103 aws-sdk-go-v2 1.36.3

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package licensemanager

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
```

```
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
```

```
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
```

```
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
```

```
        with:
          path: sdkbase
          ref: ${{ github.base_ref }}
      - name: Checkout this ref
        uses: actions/checkout@v2
        with:
          path: new-ref
          fetch-depth: 0
      - name: Get Diff
        run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
      - name: Get Target Files
        run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
      - name: Checkout scancode
        uses: actions/checkout@v2
        with:
          repository: nexB/scancode-toolkit
          path: scancode-toolkit
          fetch-depth: 1
      - name: Set up Python ${{ matrix.python-version }}
         uses: actions/setup-python@v2
        with:
          python-version: ${{ matrix.python-version }}
      # ScanCode
      - name: Self-configure scancode
        working-directory: ./scancode-toolkit
        run: ./scancode --help
      - name: Run Scan code on target
        run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
      - name: Run Scan code on pr ref
        run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
      # compare
      - name: License test
        run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
ListLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
```

```
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer
```

```
 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
```

```
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if
err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err
 = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {
```

```
 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
```

```
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
```

```
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
```

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {
```

```
// Date when the license is deleted.
DeletionDate *string

// License status.
Status types.LicenseDeletionStatus

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
```

```
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
```

```
 params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack);
```

```
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
```

GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing

Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever

```
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}
```

```
type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
```

```
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
```

```
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 Retry
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
```

```
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {
```

```
// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
```

```
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
```

```
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
```

```
 ServiceID:     ServiceID,
 OperationName: "CheckoutBorrowLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own
License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
```

```
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
             "traits": {
               "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
               "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of name to filter by.</p>"
             }
          },
          "Values": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
            }
          },
          "Operator": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
            "traits": {
              "smithy.api#documentation": "<p>An operator for filtering results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
      "type":
 "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
      },
      "output": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
         },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/GetRegisteredSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
```

```
                "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
          "type": "structure",
          "members": {
            "SubscriptionProviderArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
              }
            },
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

           "traits": {
                "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
              }
            },
            "SecretArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
              }
            },
            "SubscriptionProviderStatus": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
              "traits": {
                "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
               }
            },
            "SubscriptionProviderStatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
              }
```

```
            },
            "LastSuccessfulDataRetrievalTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved
subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
         "type": "operation",
         "input": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/subscription/GetServiceSettings"

          },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
         "type": "structure",
         "members": {}
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
      "type": "structure",
      "members": {
        "LinuxSubscriptionsDiscovery": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
          "traits": {
            "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
          }
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
          "traits": {
            "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
          }
        },
        "StatusMessage": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
          "traits": {
            "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
          }
        },
        "HomeRegions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
           "traits": {
            "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
      "type": "structure",
      "members": {
        "AmiId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
          }
```

```
        },
        "InstanceID": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
          }
        },
        "InstanceType": {
          "target": "smithy.api#String",
          "traits":
{
            "smithy.api#documentation": "<p>The instance type of the resource.</p>"
          }
        },
        "AccountID": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of the instance.</p>"
          }
        },
        "Region": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
          }
        },
        "UsageOperation": {
          "target": "smithy.api#String",

   "traits": {
            "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
          }
        },
        "ProductCode": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
          "traits": {
            "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
```

```
            }
        },
        "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
        },
        "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
        },
        "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
            }
        },
        "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
        },
        "SubscriptionProviderUpdateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider.</p>"
            }
        },
        "DualSubscription": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance.</p>"
            }
        },
        "RegisteredWithSubscriptionProvider": {
            "target": "smithy.api#String",
            "traits": {
```

```
    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
```

```
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager Linux Subscriptions",
          "arnNamespace": "license-manager-linux-subscriptions",
          "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
```

```
"smithy.rules#endpointRuleSet": {
  "version": "1.0",
  "parameters": {
    "Region": {
      "builtIn": "AWS::Region",
      "required": false,
      "documentation": "The AWS region used to dispatch the request.",
      "type": "String"
    },
    "UseDualStack": {
      "builtIn": "AWS::UseDualStack",
      "required": true,
      "default": false,
      "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
       "type": "Boolean"
    },
    "UseFIPS": {
      "builtIn": "AWS::UseFIPS",
      "required": true,
      "default": false,
      "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
      "type": "Boolean"
    },
    "Endpoint": {
      "builtIn": "SDK::Endpoint",
      "required": false,
      "documentation": "Override the endpoint used to send this request",
      "type": "String"
    }
  },
  "rules": [
    {
      "conditions": [
        {
          "fn": "isSet",
          "argv": [
            {
              "ref": "Endpoint"
            }
          ]
        }
      ],
      "rules": [
        {
          "conditions": [
            {
```

```
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }

        ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]

}
                      ],
                      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                      "type": "error"
                    },
                    {
                      "conditions": [],
                      "endpoint": {
                        "url": {
                          "ref": "Endpoint"
                        },
                        "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }
                  ],
                  "type": "tree"

            }
            ],
```

```
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},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {

                                    "ref": "UseFIPS"
                                        },
                                        true
                                    ]
                                },
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
```

```
                },
                true
            ]
        }

],
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                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"

                },
                                                "supportsFIPS"
                                            ]
                                        }
                                    ]
                                },
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        true,
                                        {
                                            "fn": "getAttr",
                                            "argv": [

                                                {
                                                    "ref": "PartitionResult"
                                                },
                                                "supportsDualStack"
                                            ]
                                        }
                                    ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [],

    "rules": [
                                        {
```

```
                                        "conditions": [],
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                                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
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                                ],

                        "type": "tree"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                            "type": "error"
                        }
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                    "type": "tree"
                },
                {

            "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {

                        "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "fn": "getAttr",
                                            "argv": [
```

```
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsFIPS"
                            ]
                        },
                        true

                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "FIPS is enabled
but this partition does not support FIPS",
            "type": "error"
        }
    ],
    "type": "tree"
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
```

```
                    },
                    true

                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {

                                    "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "rules": [

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                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"

                    }
                ],
                "type": "tree"
            },
```

```
                                {
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                                    "error": "DualStack is enabled but this partition does not support DualStack",
                                    "type": "error"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ],
    "type": "tree"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"
```

```
    }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {

    "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
          }

  },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
```

```
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {

  "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
       },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
        }
```

```
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }

     },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
        }
      },
      "params": {
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        "UseFIPS": false,
        "UseDualStack": true
      }
    },
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                {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
                    }
                  },
                  "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
                  "expect": {
                    "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
                  },
                  "params": {

               "Region": "us-iso-east-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                    }
                  },
                  "params": {
                    "Region": "us-iso-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
                  "expect": {
                    "error": "DualStack is enabled but this partition does not support DualStack"
                  },
                  "params": {
                    "Region": "us-iso-east-1",
                    "UseFIPS": false,
```

```
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS":
false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
             }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-isob-east-1",
```

```
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {

          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }

    },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
```

```
                "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                "expect": {
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                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {

"Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "Missing region",
                "expect": {
                  "error": "Invalid Configuration: Missing Region"
                }
              }
            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled LinuxSubscriptionsDiscovery"

       },
            {
              "name": "Disabled",
```

```
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
          "type": "structure",
          "members": {
            "SourceRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
              "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "OrganizationIntegration": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
              "traits": {
                "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

  {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>.</p>\n          <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto streamline results:</p>\n          <ul>\n            <li>\n              <p>\n                <code>AccountID</code>\n              </p>\n            </li>\n            <li>\n              <p>\n                <code>AmiID</code>\n              </p>\n            </li>\n            <li>\n              <p>\n <code>DualSubscription</code>\n              </p>\n            </li>\n            <li>\n              <p>\n <code>InstanceID</code>\n              </p>\n            </li>\n            <li>\n              <p>\n <code>InstanceType</code>\n              </p>\n            </li>\n            <li>\n              <p>\n <code>ProductCode</code>\n              </p>\n            </li>\n            <li>\n              <p>\n <code>Region</code>\n              </p>\n            </li>\n            <li>\n              <p>\n <code>Status</code>\n              </p>\n            </li>\n            <li>\n              <p>\n <code>UsageOperation</code>\n              </p>\n            </li>\n          </ul>\n          <p>For each filter, you can use one of the following <code>Operator</code>\n  values to \n  \t\tdefine the behavior of the filter:</p>\n          <ul>\n            <li>\n              <p>\n <code>contains</code>\n              </p>\n            </li>\n            <li>\n              <p>\n <code>equals</code>\n              </p>\n            </li>\n            <li>\n              <p>\n <code>Notequal</code>\n              </p>\n            </li>\n          </ul>"
                }
            },
            "MaxResults": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to
 start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {

         "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",

    "items": "Subscriptions"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
          "type": "structure",
          "members": {
            "Filters": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n       <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n        <p>The valid names for this filter are:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Subscription</code>\n            </p>\n          </li>\n        </ul>\n        <p>The
       valid Operators for this filter are:</p>\n        <ul>\n          <li>\n            <p>\n              <code>contains</code>\n            </p>\n          </li>\n          <li>\n            <p>\n              <code>equals</code>\n            </p>\n          </li>\n          <li>\n            <p>\n              <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
```

```
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
          "Subscriptions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
          "target":
```

```
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration
resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSources": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
          "traits": {
            "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }

  },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
      "type": "structure",
      "members": {
        "RegisteredSubscriptionProviders": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
          "traits": {
            "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
          }
        },

         "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
      "type": "operation",
      "input": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
          },
          "errors": [
            {

        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
            "smithy.api#http": {
              "method": "GET",
              "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
          "type": "structure",
          "members": {
            "resourceArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
               "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
          "type": "structure",
          "members": {
            "tags": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "EQUAL",
              "value": "Equal",
              "documentation": "Equal operator"
            },
            {
              "name": "NOT_EQUAL",
              "value": "NotEqual",
              "documentation": "Not equal operator"
            },
            {
              "name": "CONTAINS",
              "value": "Contains",
              "documentation": "Contains operator"
            }
          ],
          "smithy.api#length": {
            "min": 1,
            "max": 20
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled OrganizationIntegration"
            },
            {
              "name": "Disabled",
```

```
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
          "type": "list",
          "member": {
            "target": "smithy.api#String"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
           },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/RegisterSubscriptionProvider"

            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
          "type": "structure",
          "members": {
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
              "smithy.api#required": {}
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the
 Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation":
 "<p>The Linux subscription provider that you registered.</p>"
            }
          },
          "SubscriptionProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
             "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
            }
```

```
            },
            "LastSuccessfulDataRetrievalTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

   }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
         "type": "string",
         "traits": {
            "smithy.api#enum": [
               {
                  "name": "InProgress",
```

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            "value": "InProgress",
            "documentation": "InProgress status"
          },
          {
            "name": "Completed",
            "value": "Completed",
            "documentation": "Completed status"
          },
          {
            "name": "Successful",
            "value": "Successful",
            "documentation": "Successful status"
          },
          {
            "name": "Failed",
            "value": "Failed",
            "documentation": "Failed status"
          }
        ]
      }
    },

    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          }
        }
      },
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        },
        "smithy.api#uniqueItems": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
      "type": "map",
      "key": {
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
          "Name":
{
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
          },
          "Type": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
            }
          },
          "InstanceCount": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
```

```
        "traits": {
          "smithy.api#enum": [

{
                "name": "RedHat",
                "value": "RedHat",
                "documentation": "RedHat subscription provider namespace"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "ACTIVE",
                "value": "ACTIVE",
                "documentation": "ACTIVE status"
              },
              {
                "name": "INVALID",
                "value": "INVALID",

 "documentation": "INVALID status"
              },
              {
                "name": "PENDING",
                "value": "PENDING",
                "documentation": "PENDING status"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
          "type": "list",
          "member": {
            "target": "smithy.api#String"
          },
          "traits": {
            "smithy.api#length": {
              "min": 0,
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            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
 {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tags": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }

      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation":
"<p>The request was denied due to request throttling.</p>",
          "smithy.api#error": "client"
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
         "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{resourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "resourceArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "tagKeys": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
          "traits": {

        "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
            "smithy.api#httpQuery": "tagKeys",
            "smithy.api#required": {}
          }
```

```
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

 },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
        },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
        "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required": {}
            }
        },
        "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from.</p>",
                "smithy.api#required": {}
            }
        },
        "AllowUpdate": {
            "target":
 "smithy.api#Boolean",
            "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region.</p>"
            }
        }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
    "type": "structure",
    "members": {
      "LinuxSubscriptionsDiscovery": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
        "traits": {
          "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
        }
      },
      "LinuxSubscriptionsDiscoverySettings": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
         "traits": {
          "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from.</p>"
        }
      },
      "Status": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
        "traits": {
          "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
        }
```

```
            },
            "StatusMessage": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
               "traits": {
                  "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
               }

        },
            "HomeRegions": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
               "traits": {
                  "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
               }
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
         }
      }
   }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
```

```
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options)) (*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
```

```
struct {

// A structure containing data about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
```

```
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
```

```
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
```

```
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
```

ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": " You don't have sufficient access to perform this action. ",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",

```
            "traits": {
                "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
            }
        },
        "ActiveDirectorySettings":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
            "traits": {
                "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
            }
        },
        "ActiveDirectoryType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
            "traits": {
                "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
    "type": "structure",
    "members": {
        "DomainName": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
            }
        },
        "DomainIpv4List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                "smithy.api#length": {
                    "min": 1,
                    "max": 2
                }
            }
        },
        "DomainCredentialsProvider": {
            "target":
```

```
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                  "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration.</p>"
                }
              },
              "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                  "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
              }
            },
            "traits": {
              "smithy.api#documentation": "<p>Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory.</p>"
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
            "type": "string",
            "traits": {
              "smithy.api#enum": [
                {
                  "name": "SELF_MANAGED",
                  "value": "SELF_MANAGED",
                  "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                  "name": "AWS_MANAGED",
                  "value": "AWS_MANAGED",
                  "documentation": "AWS_MANAGED type of Active Directory"
                }
              ]
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#Arn": {
            "type": "string",
            "traits": {
              "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
 {
            "type": "operation",
            "input": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n          <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n          </note>",
            "smithy.api#http":
 {
              "code": 200,
              "method": "POST",
              "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
          "type": "structure",
          "members": {
            "Username": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
              "smithy.api#required": {}
            }
          },
           "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The identity provider for the user.</p>",
              "smithy.api#required": {}
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to associate.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
            }
          }
        },
        "traits": {

    "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
      },
      "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
           }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
          "smithy.api#error": "server"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },

        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
                }
            }
        },
        "traits": {
```

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            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
```

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        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
```

```
            "ServerType": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
              "traits": {
                "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
          "type": "structure",
          "members": {
            "LicenseServerEndpoint": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
              "traits": {
                "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
```

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
```

```
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}

      }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Directory": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
```

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                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
```

```
            "InstanceUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
         "type": "structure",
         "members": {
            "InstanceUserSummary":
{
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
         "type": "structure",
         "members": {
            "Subnets": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
               "traits": {
                  "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                  "smithy.api#length": {
                     "min": 1
                  },
```

```
    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
            },
            "Operation": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
                }
            },
            "Value": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
            "ActiveDirectoryIdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
```

```
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
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                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
              }
            },
            "FailureMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
          "type": "list",
          "member": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
          "type": "structure",
          "members": {
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "Status": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                "smithy.api#required": {}
              }
            },
            "Products": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
               "traits": {
                "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                "smithy.api#required": {}
              }
            },
            "LastStatusCheckDate": {
              "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The date of the last status check.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
    "type": "structure",
    "members": {
        "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                "smithy.api#required": {}
            }
        },
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },

"IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                "smithy.api#required": {}
            }
```

```
            },
            "Status": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                  "smithy.api#required": {}
               }
            },
            "InstanceUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
                }
            },
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
               }
            },
            "AssociationDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
               }
            },
            "DisassociationDate": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
         "type": "list",
```

```
    "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
    "type": "structure",
    "members": {
      "message": {
        "target": "smithy.api#String"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
       "smithy.api#error": "server",
      "smithy.api#httpError": 500
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
      "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
  },
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    "type": "service",
    "version": "2018-05-10",
    "operations": [
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        "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
       },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
      },
```

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        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

      "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
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        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

          "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
{
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
```

```
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will
return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
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        "rules": [
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            "conditions": [
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                "fn": "isSet",
                "argv": [
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                    "ref": "Endpoint"
                  }
                ]
              }
             ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [
                  {

                    "fn": "booleanEquals",
                    "argv": [
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                        "ref": "UseDualStack"
                      },
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                    ]
                  }
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                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
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                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },

"properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }
              ],
              "type": "tree"
            },
            {
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                  "argv": [
                    {
                      "ref": "Region"
                    }
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                }
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              "rules": [
                {
                  "conditions": [
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                      "fn": "aws.partition",

                      "argv": [
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                          "ref": "Region"
                        }
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                      "assign": "PartitionResult"
                    }
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                        "argv": [
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                            "ref": "UseFIPS"
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true

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                        ]
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                        "fn": "booleanEquals",
                        "argv": [
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                            "ref": "UseDualStack"
                          },
                          true
                        ]
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                    ],
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                        "conditions": [
                          {
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"fn": "booleanEquals",

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                                "argv": [
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                                    "ref": "PartitionResult"
                                  },
                                  "supportsFIPS"
                                ]
                              }
                            ]
                          },
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              true,
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                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]
                                    }

                            ]
                        }
                    ],
                    "rules": [
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                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }

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                    "type": "tree"
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                {
                    "conditions": [],
                    "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [

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                            "ref": "UseFIPS"
                        },
                        true
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                }
            ],
            "rules": [
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                    "conditions": [
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                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "fn": "getAttr",
                                    "argv": [

                {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
                                true
                            ]
                        }
                    ],
                    "rules": [
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                            "conditions": [],
                            "endpoint": {

        "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled but this partition does not support FIPS",
                    "type": "error"

}
                ],
                "type": "tree"
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            {
                "conditions": [
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                  },
                  true
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            ],
            "rules": [
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                    "argv": [
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                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]

          }
                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {
                        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }

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                "type": "tree"
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              {
                "conditions": [],
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                    {
                        "conditions": [],
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                            "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
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        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect":
{
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
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                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",

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                "UseDualStack": false
              }
            },
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              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
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{
                  "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
```

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            "UseFIPS":
true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
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            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
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            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
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        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
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            }
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            "UseFIPS": false,
             "UseDualStack": true
          }
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          "expect": {
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            }
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          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
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```
            }
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        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": false

    }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "error": "DualStack is enabled but this partition does not support DualStack"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
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                    "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
                }

    },
            "params": {
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            "Region": "us-iso-east-1",
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            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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          "params": {
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            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-isob-east-1",

  "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
```

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      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {

     "endpoint": {
            "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack":
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        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
```

```
                },
                {
                  "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                  "expect": {
                    "error": "Invalid Configuration:
 Dualstack and custom endpoint are not supported"
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "Missing region",
                  "expect": {
                    "error": "Invalid Configuration: Missing Region"
                  }
                }
              ],
              "version": "1.0"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
          "type": "structure",
          "members": {
            "ProvisioningStatus": {
              "target":
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
               "traits": {
                 "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
 \n\t\t\tlicense server.</p>"
              }
            },
            "HealthStatus": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
              "traits": {
                "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
              }
            },
            "Ipv4Address": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
 \n\t\t\tlicense server.</p>"
              }
```

```
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Information
 about a Remote Desktop Services (RDS) license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
          "type": "structure",
          "members": {
            "IdentityProviderArn": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
              }
            },
            "ServerType": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
              "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>"
              }
            },
            "ServerEndpoint": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

   "traits": {
                "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
              }
            },
            "StatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
              }
            },
            "LicenseServerEndpointId": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
              }
            },
            "LicenseServerEndpointArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits":
```

```
{
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server.</p>"
              }
            },
            "LicenseServerEndpointProvisioningStatus": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
              "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint</p>"
              }
            },
            "LicenseServers": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
              "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
              }
            },

           "CreationTime": {
              "target": "smithy.api#Timestamp",
              "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server endpoint.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
          "type": "string"
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

      "type": "string",
          "traits": {
            "smithy.api#enum": [
```

```
            {
              "name": "PROVISIONING",
              "value": "PROVISIONING",
              "documentation": ""
            },
            {
              "name": "PROVISIONING_FAILED",
              "value": "PROVISIONING_FAILED",
              "documentation": ""
            },
            {
              "name": "PROVISIONED",
              "value": "PROVISIONED",
              "documentation": ""
            },
            {
              "name": "DELETING",
              "value": "DELETING",
              "documentation": ""
            },
            {
              "name": "DELETION_FAILED",
              "value": "DELETION_FAILED",
              "documentation": ""

           },
            {
              "name": "DELETED",
              "value": "DELETED",
              "documentation": ""
            }
          ]
       }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
       "type": "string",
       "traits": {
          "smithy.api#enum": [
            {
              "name": "HEALTHY",
              "value": "HEALTHY",
              "documentation": ""
            },
            {
              "name": "UNHEALTHY",
              "value": "UNHEALTHY",
              "documentation": ""
            },
```

```
                {
                    "name": "NOT_APPLICABLE",
                    "value": "NOT_APPLICABLE",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {

            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
             },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
```

```
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use
 the following filters to streamline results:</p>\n        <ul>\n        <li>\n        <p>Product</p>\n        </li>\n
        <li>\n        <p>DirectoryId</p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
 \n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

            "traits": {
                    "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources
 that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
 empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
 next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
```

```
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },

{
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/instance/ListInstances"
      },
      "smithy.api#paginated": {
        "inputToken": "NextToken",
        "outputToken": "NextToken",
        "pageSize": "MaxResults",
        "items": "InstanceSummaries"
      }
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
    "type": "structure",
    "members":
```

```
{
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n
      <li>\n            <p>InstanceId</p>\n          </li>\n        </ul>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
      "type": "structure",
      "members": {
        "InstanceSummaries": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next
 token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
          }
        }
      },
```

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      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/license-server/ListLicenseServerEndpoints"
        },

      "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
          "pageSize": "MaxResults",
          "items": "LicenseServerEndpoints"
        }
      }
```

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    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
      "type": "structure",
      "members": {
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
            "smithy.api#range": {
              "min": 1,
              "max": 100
            }
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n        <li>\n          <p>IdentityProviderArn</p>\n        </li>\n      </ul>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
      "type": "structure",
      "members": {
        "LicenseServerEndpoints": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
          "traits": {
            "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
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empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type":
"operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": " Lists the user-based subscription products available from an identity provider. ",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"

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            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "ProductUserSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
{
          "type": "structure",
          "members": {
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n          </p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>Status</p>\n            </li>\n            <li>\n              <p>Username</p>\n
</li>\n            <li>\n              <p>Domain</p>\n            </li>\n          </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating.
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This is the nextToken \n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service
 hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target":
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 "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
              "method": "GET",
              "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}

           }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
          "type": "structure",
          "members": {
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
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    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListUserAssociations"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceUserSummaries"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
    "type": "structure",
    "members": {
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
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                "smithy.api#documentation": "<p>The ID of the EC2 instance, which
 provides user-based subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {

      "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n        <ul>\n
   <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n          </li>\n
<li>\n            <p>Domain</p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
 \n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummaries": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
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```
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username":
{
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
           "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
```

```
            "ProductUserArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
              }
            },
            "StatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {

            "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
              }
            },
            "SubscriptionStartDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The start date of a subscription.</p>"
              }
            },
            "SubscriptionEndDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The end date of a subscription.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
          "type":
 "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
          "type": "structure",
          "members": {
```

```
            "RdsSalCredentialsProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider":
 {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target":
 "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
```

```
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
          "type": "structure",
          "members": {
            "IdentityProvider": {

       "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
                "smithy.api#required": {}
              }
            },
            "Settings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
              "traits":
 {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation":
 "<p>Metadata that describes the results of an identity provider operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",

     "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
              "smithy.api#length": {
```

```
                    "min": 1
                }
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
    "type": "string",
    "traits": {
        "smithy.api#length": {

     "min": 5,
            "max": 200
        },
        "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
    "type": "structure",
    "members": {
        "Endpoint": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
    "type": "union",
    "members": {
        "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
                "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {

    "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
              "smithy.api#length": {
                "min": 1
              },
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

           "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
              "smithy.api#required": {}
            }
```

```
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

          },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
```

```
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/StartProductSubscription"
            }

      }
       },
       "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
          "type": "structure",
          "members": {
             "Username": {
                "target": "smithy.api#String",
                "traits": {
                   "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                   "smithy.api#required": {}
                }
             },
             "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                   "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                   "smithy.api#required": {}
                }
             },
             "Product": {
                "target": "smithy.api#String",
                "traits": {

  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n         <p>Valid values:
<code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n
</p>",
                   "smithy.api#required": {}
                }
             },
             "Domain": {
                "target": "smithy.api#String",
                "traits": {
                   "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
                }
             },
             "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                   "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
                }
```

```
  }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

    },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
```

```
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

    },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/StopProductSubscription"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
              }
            },
            "IdentityProvider": {
              "target":
 "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
              }
            },
            "ProductUserArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
```

```
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
              "smithy.api#required": {}
            }

    }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {

 "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation":
 "<p>Adds tags to a resource.</p>",
        "smithy.api#http": {
          "method": "PUT",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation":
 "<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
 {
        "type": "structure",
        "members": {
```

```
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {

             "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
```

```
        }
          },
          "TagKeys": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
              "smithy.api#httpQuery": "tagKeys",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
          "smithy.api#http": {
```

```
      "code": 200,
            "method": "POST",
            "uri": "/identity-provider/UpdateIdentityProviderSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },

          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
            }
          },
          "UpdateSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
            "traits": {
              "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n          <li>\n            <p>Subnets which you want to add to provision VPC endpoints.</p>\n          </li>\n
      <li>\n            <p>Subnets which you want to remove the VPC endpoints from.</p>\n          </li>\n
<li>\n            <p>Security
 group ID which permits traffic to the VPC endpoints.</p>\n          </li>\n        </ul>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
      "type": "structure",
      "members": {
        "IdentityProviderSummary": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
          "traits": {
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
      "type": "structure",
      "members": {
        "AddSubnets": {

       "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
            "smithy.api#required": {}
          }
        },
        "RemoveSubnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
            "smithy.api#required": {}
          }
        },
        "SecurityGroupId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
          "traits": {
            "smithy.api#documentation": "<p>A security group ID that
 allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for
activation servers.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
```

```
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
ListReceivedLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
```

ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
```

```
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if
err = addCredentialSource(stack, options); err != nil {
 return err
}
```

```
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
{
   "smithy": "2.0",
   "metadata": {
```

```
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpResponseCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
      },
      {
        "id": "Service",
        "namespace": "*"
      }
    ]
  },
  "shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
      "type": "service",
      "version": "2018-08-01",
      "operations": [
        {
          "target": "com.amazonaws.licensemanager#AcceptGrant"
        },

 {
          "target": "com.amazonaws.licensemanager#CheckInLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CheckoutLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CreateGrant"
        },
```

```
    {
      "target": "com.amazonaws.licensemanager#CreateGrantVersion"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateToken"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicense"
```

```
},
{
   "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
   "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
   "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
   "target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
   "target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
   "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
 },
{
   "target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
   "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenses"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

  "target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
   "target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
```

```
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
        },
        {
            "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
        },
        {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
        },
        {
            "target": "com.amazonaws.licensemanager#ListResourceInventory"
        },
        {
            "target": "com.amazonaws.licensemanager#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanager#ListTokens"
        },
        {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
         },
        {
            "target": "com.amazonaws.licensemanager#RejectGrant"
        },
        {
            "target": "com.amazonaws.licensemanager#TagResource"
        },
        {
            "target": "com.amazonaws.licensemanager#UntagResource"
        },
        {
            "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
        },
        {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
        },
        {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
        },
        {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
        }
    ],
    "traits": {
        "aws.api#service": {
             "sdkId": "License Manager",
            "arnNamespace": "license-manager",
            "cloudFormationName": "LicenseManager",
            "cloudTrailEventSource": "licensemanager.amazonaws.com",
```

```
            "endpointPrefix": "license-manager"
        },
        "aws.auth#sigv4": {
            "name": "license-manager"
        },
        "aws.protocols#awsJson1_1": {},
        "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software vendors across multiple \n         Amazon Web Services accounts and on-premises servers.</p>",
        "smithy.api#title": "AWS License Manager",
        "smithy.api#xmlNamespace": {
            "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
        },
        "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
                "Region": {
                    "builtIn": "AWS::Region",
                    "required": false,
                    "documentation": "The AWS region used to dispatch the request.",
                    "type": "String"
                },
                "UseDualStack": {
                    "builtIn": "AWS::UseDualStack",
                    "required": true,
                    "default": false,
                    "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                    "type": "Boolean"
                },
                "UseFIPS": {
                    "builtIn": "AWS::UseFIPS",
                    "required": true,
                    "default": false,
                    "documentation": "When true, send
 this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                    "type": "Boolean"
                },
                "Endpoint": {
                    "builtIn": "SDK::Endpoint",
                    "required": false,
                    "documentation": "Override the endpoint used to send this request",
                    "type": "String"
                }
            },
            "rules": [
                {
                    "conditions": [
```

```
            {
              "fn": "isSet",
              "argv": [
                {
                  "ref": "Endpoint"
                }
              ]

          }
          ],
          "type": "tree",
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
              "type": "error"
            },
            {

        "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [],
              "endpoint": {
                "url": {
                  "ref": "Endpoint"
```

```
                    },
                    "properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }
              ]
            },
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Region"
                    }
                  ]
                }
              ],
              "type": "tree",
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "aws.partition",
                      "argv": [
                        {
                          "ref": "Region"
                        }
                      ],
                      "assign": "PartitionResult"
                    }
                  ],
                  "type": "tree",
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref":
"UseFIPS"
                            },
                            true
                          ]
                        },
                        {
```

```
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "type": "tree",
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]

                      }
                    ]
                  },
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },

"supportsDualStack"
                        ]
                      }
                    ]
                  }
                ],
                "type": "tree",
                "rules": [
```

```
                                    {
                                        "conditions": [],
                                        "endpoint": {
                                            "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}

                                    },
                                        "type": "endpoint"
                                    }
                                ]
                                },
                                {
                                    "conditions": [],
                                    "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                                    "type": "error"
                                }
                            ]
                        },
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",

                                "argv": [
                                        {
                                            "ref": "UseFIPS"
                                        },
                                        true
                                    ]
                                }
                            ],
                            "type": "tree",
                            "rules": [
                                {
                                    "conditions": [
                                        {
                                            "fn": "booleanEquals",
                                            "argv": [
                                                true,

                                {
                                                    "fn": "getAttr",
                                                    "argv": [
                                                        {
                                                            "ref": "PartitionResult"
```

```
                        },
                        "supportsFIPS"
                    ]
                }
            ]
        }
    ],
    "type": "tree",
    "rules": [

{
            "conditions": [],
            "endpoint": {
                "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ]
},
{
    "conditions": [],
    "error": "FIPS is enabled but this
partition does not support FIPS",
    "type": "error"
}
]
},
{
"conditions": [
    {
    "fn": "booleanEquals",
    "argv": [
        {
        "ref": "UseDualStack"
        },
        true
    ]
    }
],
"type": "tree",
 "rules": [
    {
    "conditions": [
        {
        "fn": "booleanEquals",
        "argv": [
```

```
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },

    "supportsDualStack"
                                        ]
                                    }
                                ]
                            }
                        ],
                        "type": "tree",
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}

                        },
                                "type": "endpoint"
                            }
                        ]
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ]
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                     "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    }
]
```

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        },
        {
          "conditions": [],
          "error": "Invalid Configuration: Missing Region",
          "type": "error"
        }
      ]
    },
    "smithy.rules#endpointTests": {
      "testCases": [
        {
          "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager.af-south-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "af-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-northeast-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-northeast-1",
            "UseFIPS": false,
            "UseDualStack": false
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```
      }
    },
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      "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-northeast-2.amazonaws.com"
        }
      },
      "params": {
        "Region": "ap-northeast-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-northeast-3.amazonaws.com"
        }
      },
      "params": {
        "Region": "ap-northeast-3",
        "UseFIPS": false,
        "UseDualStack": false
      }

  },
    {
      "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-south-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "ap-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
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      "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-southeast-1.amazonaws.com"
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```
}
            },
            "params": {
              "Region": "ap-southeast-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.ap-southeast-2.amazonaws.com"
              }
            },
            "params": {
              "Region": "ap-southeast-2",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.ap-southeast-3.amazonaws.com"
              }
            },
            "params": {
              "Region": "ap-southeast-3",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.ca-central-1.amazonaws.com"
              }
            },

           "params": {
              "Region": "ca-central-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
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```
    },
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      "expect": {
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        }
      },
      "params": {
        "Region": "eu-central-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-north-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-south-1.amazonaws.com"
        }
      },
      "params": {
        "Region":
"eu-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-west-1.amazonaws.com"
        }
```

```
      },
      "params": {
        "Region": "eu-west-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
      "expect": {

      "endpoint": {
            "url": "https://license-manager.eu-west-2.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-west-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-west-3.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-west-3",
        "UseFIPS": false,

"UseDualStack": false
      }
    },
    {
      "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.me-south-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "me-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
```

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            {
              "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.sa-east-1.amazonaws.com"
                 }
              },
              "params": {
                "Region": "sa-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }

        },
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-fips.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.us-east-2.amazonaws.com"
                }
```

```
    },
      "params": {
        "Region": "us-east-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-east-2.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-2",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-west-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-west-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-west-1.amazonaws.com"
        }
      },
      "params": {

  "Region": "us-west-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
```

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                {
                  "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager.us-west-2.amazonaws.com"
                    }
                  },
                  "params": {
                    "Region": "us-west-2",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

"expect": {
                    "endpoint": {
                      "url": "https://license-manager-fips.us-west-2.amazonaws.com"
                    }
                  },
                  "params": {
                    "Region": "us-west-2",
                    "UseFIPS": true,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-fips.us-east-1.api.aws"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,

                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager.us-east-1.api.aws"
                    }
                  },
```

```
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-northwest-1",
        "UseFIPS": false,
        "UseDualStack": false

  }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
```

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      "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },

  {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
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            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-gov-west-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-west-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-west-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-gov-east-1.api.aws"
            }
          },

    "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
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      "endpoint": {
        "url": "https://license-manager.us-gov-east-1.api.aws"
      }
    },
    "params": {
      "Region": "us-gov-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
      }
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
    "expect": {
      "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": true,
       "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
      }
    },
    "params": {
      "Region": "us-iso-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
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                {
                  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
                  "expect": {
                    "error": "DualStack is enabled
but this partition does not support DualStack"
                  },
                  "params": {
                    "Region": "us-iso-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
                    }
                  },
                  "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },

               {
                  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
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                    "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
                  },
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                    "UseFIPS": true,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
                    }
                  },

            "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": true,
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```
            "UseDualStack": false
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        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

    "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,

      "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips enabled and dualstack disabled",
          "expect": {
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
```

```
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": true,
                      "UseDualStack": false,
                      "Endpoint": "https://example.com"
                    }
                  },
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                    "expect": {
                      "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": false,
                      "UseDualStack": true,
                      "Endpoint": "https://example.com"
                    }
                  },
                  {
                    "documentation": "Missing region",
                    "expect": {
                      "error": "Invalid Configuration: Missing Region"
                    }
                  }
                ],
                "version": "1.0"
              }
            }
          },
          "com.amazonaws.licensemanager#AcceptGrant": {
            "type": "operation",
            "input": {
              "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
            "output": {
              "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
            },
            "errors": [
              {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
              },
              {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
              },
```

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"

    }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
```

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            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
            "httpResponseCode": 401
          },
          "smithy.api#documentation": "<p>Access to resource denied.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 401
        }
      },
      "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
        "type": "enum",
        "members": {
          "DISTRIBUTED_GRANTS_ONLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
            }
          },
          "ALL_GRANTS_PERMITTED_BY_ISSUER": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
            }
          }
```

```
        }
      },
      "com.amazonaws.licensemanager#AllowedOperation": {

    "type": "enum",
        "members": {
          "CREATE_GRANT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CreateGrant"
            }
          },
          "CHECKOUT_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckoutLicense"
            }
          },
          "CHECKOUT_BORROW_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckoutBorrowLicense"
            }
          },
          "CHECK_IN_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckInLicense"
            }
          },
          "EXTEND_CONSUMPTION_LICENSE":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ExtendConsumptionLicense"
            }
          },
          "LIST_PURCHASED_LICENSES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ListPurchasedLicenses"
            }
          },
          "CREATE_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CreateToken"
            }
```

```
            }
        }
    },
    "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max":
7
            }
        }
    },
    "com.amazonaws.licensemanager#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
{
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n          policy associated with this account.</p>",
```

```
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
    },

 "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
            "smithy.api#default": false
        }
    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
            "AllowEarlyCheckIn": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxTimeToLiveInMinutes": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                    "smithy.api#required": {}
                }
            }

},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
```

```
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

    },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
               "target":
 "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
         }
      },
      "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
         "type": "structure",
         "members":
 {
            "LicenseArn": {
               "target": "com.amazonaws.licensemanager#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
 use the borrow consumption configuration.</p>",
                  "smithy.api#required": {}
               }
            },
            "Entitlements": {
               "target": "com.amazonaws.licensemanager#EntitlementDataList",
               "traits": {
                  "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                  "smithy.api#required": {}
```

```
            }
          },
          "DigitalSignatureMethod": {
            "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
            "traits": {
              "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
              "smithy.api#required": {}
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
          },
          "CheckoutMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Information about constraints.</p>"
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>License consumption token.</p>"
              }
            },
            "EntitlementsAllowed":
{
              "target": "com.amazonaws.licensemanager#EntitlementDataList",
              "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
              }
            },
            "NodeId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
              }
            },
            "SignedToken": {
              "target": "com.amazonaws.licensemanager#SignedToken",
              "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
              }
            },
            "IssuedAt": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
              }
            },
            "Expiration": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
              }
            },
            "CheckoutMetadata": {
              "target": "com.amazonaws.licensemanager#MetadataList",
              "traits": {
                "smithy.api#documentation": "<p>Information about constraints.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#CheckoutLicense": {
          "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n            <p>If the
account that created the license is the same that is performing the check out, you must\n            specify the account
as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
```

```
        "ProductSKU": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product
SKU.</p>",
            "smithy.api#required": {}
          }
        },
        "CheckoutType": {
          "target": "com.amazonaws.licensemanager#CheckoutType",
          "traits": {
            "smithy.api#documentation": "<p>Checkout type.</p>",
            "smithy.api#required": {}
          }
        },
        "KeyFingerprint": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementDataList",
          "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>",

    "smithy.api#required": {}
          }
        },
        "ClientToken": {
          "target": "com.amazonaws.licensemanager#ClientToken",
          "traits": {
            "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
            "smithy.api#required": {}
          }
        },
        "Beneficiary": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License beneficiary.</p>"
          }
        },
        "NodeId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Node ID.</p>"
```

```
            }
          }
        },
        "traits": {

       "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseResponse": {
        "type": "structure",
        "members": {
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>"
                }
            },
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
            "EntitlementsAllowed": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
                }
            },
             "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "IssuedAt": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
                }
            },
            "Expiration": {
```

```
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutType": {
        "type": "enum",
        "members": {
            "PROVISIONAL": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PROVISIONAL"
                }
            },
            "PERPETUAL": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PERPETUAL"
                }
             }
        }
    },
    "com.amazonaws.licensemanager#ClientRequestToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 36
            }
        }
    },
    "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
```

```
            "max": 2048
          },
          "smithy.api#pattern": "^\\S+$"
        }
      },
      "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "ConflictException",
            "httpResponseCode":
 409
          },
          "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 409
        }
      },
      "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
            }
          },
          "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
            }
          }
        },

  "traits": {
          "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
      },
      "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
```

```
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
          }
        },
        "com.amazonaws.licensemanager#ConsumptionConfiguration": {
          "type": "structure",
          "members": {
            "RenewType": {
              "target": "com.amazonaws.licensemanager#RenewType",
              "traits": {
                "smithy.api#documentation": "<p>Renewal frequency.</p>"
              }
            },
            "ProvisionalConfiguration": {
              "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
              "traits": {
                "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
               }
            },
            "BorrowConfiguration": {
              "target": "com.amazonaws.licensemanager#BorrowConfiguration",
              "traits": {
                "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
          }
        },
        "com.amazonaws.licensemanager#CreateGrant": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target":
    "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
```

```
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
          }
        },
        "com.amazonaws.licensemanager#CreateGrantRequest": {
          "type": "structure",
          "members": {
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientToken",
              "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            },
            "GrantName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Grant name.</p>",
                "smithy.api#required": {}

    }
            },
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
              }
            },
            "Principals": {
```

```
            "target": "com.amazonaws.licensemanager#PrincipalArnList",
            "traits": {
              "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN):</p>\n <ul>\n <li>\n <p>An Amazon Web Services account, which includes only the account specified.</p>\n </li>\n </ul>\n <ul>\n <li>\n <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n </li>\n </ul>\n <ul>\n <li>\n <p>An organization, which will include all accounts across your organization.</p>\n </li>\n </ul>",
              "smithy.api#required": {}
            }
          },
          "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Home Region of the grant.</p>",
              "smithy.api#required": {}
            }
          },
          "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },

      "com.amazonaws.licensemanager#CreateGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
```

```
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information,
see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
```

```
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
      "type": "structure",
      "members": {
        "ClientToken": {
          "target": "com.amazonaws.licensemanager#ClientToken",
          "traits": {
            "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",

  "smithy.api#required": {}
          }
        },
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
          }
        },
        "GrantName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant name.</p>"
          }
        },
        "AllowedOperations": {
          "target": "com.amazonaws.licensemanager#AllowedOperationList",
          "traits": {
            "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
           "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "StatusReason": {
          "target": "com.amazonaws.licensemanager#StatusReasonMessage",
          "traits": {
            "smithy.api#documentation": "<p>Grant status reason.</p>"
          }
        },
        "SourceVersion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Current version of the grant.</p>"
          }
```

```
            },
            "Options": {
                "target": "com.amazonaws.licensemanager#Options",
                "traits": {
                    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
                }
            }
        },
         "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New version of the grant.</p>"
                }
            }
        },
        "traits":
{
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
        },
        "errors": [
```

```
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
```

```
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or  all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
          },
          "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
              "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
          },
          "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
```

```
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
            }
        },
        "LicenseRules": {
            "target":
 "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n          <li>\n            <p>\n              <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
          <code>licenseAffinityToHost</code> |\n            <code>maximumCores</code> |
<code>minimumCores</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n            <code>maximumCores</code> |
<code>minimumCores</code> |\n            <code>maximumSockets</code> | <code>minimumSockets</code> |\n
        <code>maximumVcpus</code> | <code>minimumVcpus</code>\n            </p>\n          </li>\n
<li>\n
  <p>\n              <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n            <code>maximumSockets</code> |
<code>minimumSockets</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n            <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n            </p>\n          </li>\n        </ul>\n        <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"
            }
        },

  "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
                "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
                "smithy.api#documentation": "<p>Product information.</p>"
            }
        }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
```

```
      "traits": {
        "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {

          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting the license type for.</p>",
            "smithy.api#required": {}
          }
        },
        "SourceLicenseContext": {
          "target": "com.amazonaws.licensemanager#LicenseConversionContext",
          "traits": {
            "smithy.api#documentation": "<p>Information that identifies the license type you are converting from. \n\n For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in the <i>License Manager User Guide</i>.</p>",
            "smithy.api#required": {}
          }
        },
        "DestinationLicenseContext":
{
          "target": "com.amazonaws.licensemanager#LicenseConversionContext",
          "traits": {
            "smithy.api#documentation": "<p>Information that identifies the license type you are converting to. For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in the <i>License Manager User Guide</i>.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
      "type": "structure",
      "members": {
        "LicenseConversionTaskId": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
```

```
    "traits": {
            "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
          }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
       },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Creates a report generator.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
```

```
        "type": "structure",
        "members": {
          "ReportGeneratorName":
{
            "target": "com.amazonaws.licensemanager#ReportGeneratorName",
            "traits": {
              "smithy.api#documentation": "<p>Name of the report generator.</p>",
              "smithy.api#required": {}
            }
          },
          "Type": {
            "target": "com.amazonaws.licensemanager#ReportTypeList",
            "traits": {
              "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be
generated:</p>\n          <ul>\n          <li>\n          <p>License configuration report - Reports the number and
details of consumed licenses for a license configuration.</p>\n          </li>\n          <li>\n          <p>Resource
report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n          </li>\n
</ul>",
              "smithy.api#required": {}

      }
          },
          "ReportContext": {
            "target": "com.amazonaws.licensemanager#ReportContext",
            "traits": {
              "smithy.api#documentation": "<p>Defines the type of license configuration the report generator
tracks.</p>",
              "smithy.api#required": {}
            }
          },
          "ReportFrequency": {
            "target": "com.amazonaws.licensemanager#ReportFrequency",
            "traits": {
              "smithy.api#documentation": "<p>Frequency by which reports are generated.  Reports can be
generated daily, monthly, or weekly.</p>",
              "smithy.api#required": {}
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientRequestToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique,
 case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
```

```
                "traits": {
                    "smithy.api#documentation": "<p>Description of the report generator.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
generator.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
 name.</p>",
                    "smithy.api#required": {}
                }
```

```
        },
        "ProductSKU": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product SKU.</p>",
            "smithy.api#required": {}
          }
        },
        "Issuer": {
          "target": "com.amazonaws.licensemanager#Issuer",
          "traits": {
            "smithy.api#documentation": "<p>License issuer.</p>",
            "smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region for the license.</p>",
            "smithy.api#required": {}

  }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
            "smithy.api#required": {}
          }
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
          "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>",
            "smithy.api#required": {}
          }
        },
        "Beneficiary": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License beneficiary.</p>",
            "smithy.api#required": {}
          }
         },
        "ConsumptionConfiguration": {
          "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
          "traits": {
```

```
                "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional configuration for workloads\n            running with continuous connectivity. Choose a borrow configuration for workloads with offline\n            usage.</p>",
                "smithy.api#required": {}
              }
            },
            "LicenseMetadata": {
              "target": "com.amazonaws.licensemanager#MetadataList",
              "traits": {
                "smithy.api#documentation": "<p>Information about the license.</p>"
              }
            },
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientToken",
              "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#CreateLicenseResponse": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanager#LicenseStatus",
              "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
              }
            },
            "Version": {
               "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
              }
            }
          },
          "traits": {
```

```
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersion": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
```

```
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>",
                "smithy.api#required": {}
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#Issuer",
            "traits":
{
                "smithy.api#documentation": "<p>License issuer.</p>",
                "smithy.api#required": {}
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                 "smithy.api#documentation": "<p>Information about the license.</p>"
            }
        },
        "Entitlements": {
```

```
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
              "smithy.api#documentation": "<p>License entitlements.</p>",
              "smithy.api#required": {}
            }
          },
          "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage.</p>",
              "smithy.api#required": {}
            }
          },

  "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>",
              "smithy.api#required": {}
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          },
          "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the license.</p>"
            }
          }
        },
        "traits": {

 "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
```

```
            "traits": {
              "smithy.api#documentation": "<p>License ARN.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>New version of the license.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
{}
        }
      },
      "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
```

```
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT token used to get an access token. With an access token,\n          you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n          call License Manager to manage the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits":
{
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n          JWT token.</p>",
              "smithy.api#required": {}
            }
          },
          "RoleArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n          License Manager does not check whether the roles are in use.</p>"
            }
          },
          "ExpirationInDays": {
            "target": "com.amazonaws.licensemanager#Integer",
            "traits": {
              "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The default is 365 days.</p>"
            }
          },
          "TokenProperties": {
             "target": "com.amazonaws.licensemanager#MaxSize3StringList",
            "traits": {
              "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The data is mapped\n          to the amr claim of the JWT token.</p>"
            }
```

```
        },
        "ClientToken": {
          "target": "com.amazonaws.licensemanager#ClientToken",
          "traits": {
            "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
      "type": "structure",
      "members": {
        "TokenId": {
          "target": "com.amazonaws.licensemanager#String",

          "traits": {
            "smithy.api#documentation": "<p>Token ID.</p>"
          }
        },
        "TokenType": {
          "target": "com.amazonaws.licensemanager#TokenType",
          "traits": {
            "smithy.api#documentation": "<p>Token type.</p>"
          }
        },
        "Token": {
          "target": "com.amazonaws.licensemanager#TokenString",
          "traits": {
            "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DateTime": {
      "type": "timestamp"
    },
    "com.amazonaws.licensemanager#DatetimeRange": {
      "type": "structure",
      "members": {
        "Begin": {
```

```
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Start of the time range.</p>",
              "smithy.api#required": {}
            }
          },
          "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>End of the time range.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
        }
      },
      "com.amazonaws.licensemanager#DeleteGrant": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
```

```
            },
            "Version": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation":
"<p>Grant version.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanager#DeleteLicense": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },

    "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n        <p>You cannot
delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members":
{
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
```

```
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
         }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n          <p>This action deletes the report generator, which stops it from generating future reports.\n          The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
          "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be
deleted.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {

 "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          },
          "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the license.</p>",
              "smithy.api#required":
{}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
```

```
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {
    "type": "structure",
    "members": {
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "DeletionDate": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DeleteToken": {
    "type": "operation",
     "input": {
        "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
```

```
    {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
      }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
      "type": "structure",
      "members": {
        "TokenId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token ID.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}

      }
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
      "type": "enum",
      "members": {
        "JWT_PS384": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "JWT_PS384"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#Entitlement": {
      "type": "structure",
      "members": {
        "Name": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement name.</p>",
              "smithy.api#required": {}
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
            }
          },
          "MaxCount": {
            "target": "com.amazonaws.licensemanager#Long",
            "traits": {
              "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
            }
          },
          "Overage": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
            }
          },
          "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementUnit",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement unit.</p>",
              "smithy.api#required": {}
            }
          },
          "AllowCheckIn": {
            "target":
"com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
        }
      },
      "com.amazonaws.licensemanager#EntitlementData": {
        "type": "structure",
        "members": {
          "Name": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement data name.</p>",
              "smithy.api#required": {}
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement
data value.</p>"
            }
          },
          "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement data unit.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
        }
      },
      "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#EntitlementData"
        }
      },
      "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "enum",
        "members": {
          "COUNT": {
            "target": "smithy.api#Unit",
            "traits": {

"smithy.api#enumValue": "Count"
            }
          },
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "SECONDS": {
```

```
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Seconds"
    }
},
"MICROSECONDS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Microseconds"
    }
},
"MILLISECONDS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Milliseconds"
    }
},
"BYTES": {
    "target": "smithy.api#Unit",
     "traits": {
        "smithy.api#enumValue": "Bytes"
    }
},
"KILOBYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Kilobytes"
    }
},
"MEGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabytes"
    }
},
"GIGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabytes"
    }
},
"TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes"
    }
},
"BITS":
```

```
{
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits"
            }
        },
        "KILOBITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits"
            }
        },
        "MEGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits"
            }
        },
        "GIGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits"
            }
        },
        "TERABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits"

    }
        },
        "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Percent"
            }
        },
        "BYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes/Second"
            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
```

```
        },
        "MEGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabytes/Second"
          }
        },
        "GIGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
           "traits": {
            "smithy.api#enumValue": "Gigabytes/Second"
          }
        },
        "TERABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabytes/Second"
          }
        },
        "BITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits/Second"
          }
        },
        "KILOBITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits/Second"
          }
        },
        "MEGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue":
"Megabits/Second"
          }
        },
        "GIGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits/Second"
          }
        },
        "TERABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits/Second"
```

```
            }
          },
          "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Count/Second"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#EntitlementList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Entitlement"
        }
      },
      "com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },
      "com.amazonaws.licensemanager#EntitlementUnit": {
        "type": "enum",
        "members": {
          "COUNT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Count"
            }
          },
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "SECONDS":
{
            "target": "smithy.api#Unit",
```

```
    "traits": {
      "smithy.api#enumValue": "Seconds"
    }
  },
  "MICROSECONDS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Microseconds"
    }
  },
  "MILLISECONDS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Milliseconds"
    }
  },
  "BYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bytes"
    }
  },
  "KILOBYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobytes"
     }
  },
  "MEGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabytes"
    }
  },
  "GIGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabytes"
    }
  },
  "TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabytes"
    }
  },
  "BITS": {
    "target": "smithy.api#Unit",
```

```
            "traits": {
                "smithy.api#enumValue": "Bits"
            }
        },
        "KILOBITS": {
            "target": "smithy.api#Unit",
            "traits": {

             "smithy.api#enumValue": "Kilobits"
            }
        },
        "MEGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits"
            }
        },
        "GIGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits"
            }
        },
        "TERABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits"
            }
        },
        "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Percent"
            }
        },
        "BYTES_PER_SECOND": {
            "target":
"smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes/Second"
            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
```

```
            "MEGABYTES_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
              }
            },
            "GIGABYTES_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
              }
            },
            "TERABYTES_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {

"smithy.api#enumValue": "Terabytes/Second"
              }
            },
            "BITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Bits/Second"
              }
            },
            "KILOBITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
              }
            },
            "MEGABITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Megabits/Second"
              }
            },
            "GIGABITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
              }
            },

          "TERABITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Terabits/Second"
```

```
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

       "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
    }
},
"com.amazonaws.licensemanager#EntitlementUsageList":
```

```
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
```

```
                "smithy.api#required": {}

            }
        },
        "DryRun": {
            "target": "com.amazonaws.licensemanager#Boolean",
            "traits": {
                "smithy.api#default": false,
                "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
    "type": "structure",
    "members": {
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },

        "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#FailedDependencyException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        },
        "ErrorCode": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
```

```
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "FailedDependency",
            "httpResponseCode": 424
          },
          "smithy.api#documentation":
 "<p>A dependency required to run the API is missing.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 424
        }
      },
      "com.amazonaws.licensemanager#Filter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#FilterName",
            "traits": {
              "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
            }
          },
          "Values": {
            "target": "com.amazonaws.licensemanager#FilterValues",
            "traits": {
              "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only
specify one value for the filter.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter
 name and value pair that is used to return more specific results from a\n          describe operation. Filters can be used
to match a set of resources by specific criteria,\n          such as tags, attributes, or IDs.</p>"
        }
      },
      "com.amazonaws.licensemanager#FilterLimitExceededException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
          },
          "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
          "smithy.api#error": "client",
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        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
    "input": {
         "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n         are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
 {
        "type": "structure",
        "members": {
            "AccessToken": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Temporary access token.</p>"
                }
            }
```

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    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#GetGrant": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#GetGrantRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"

    },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
  },
  "com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
      "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
         "traits": {
           "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
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            "smithy.api#required": {}
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetGrantResponse": {
      "type": "structure",
      "members": {
        "Grant": {
          "target": "com.amazonaws.licensemanager#Grant",
          "traits": {
            "smithy.api#documentation": "<p>Grant details.</p>"
          }
        }
      },
      "traits": {

    "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicense": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
```

```
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"

        },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits":
{
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
          "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
            }
          },
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          },
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>"
             }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
          },
          "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
              "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
            }
          },
          "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
```

```
        "traits": {
            "smithy.api#documentation": "<p>License rules.</p>"
        }
    },
    "LicenseCount": {
        "target": "com.amazonaws.licensemanager#BoxLong",

       "traits": {
            "smithy.api#documentation": "<p>Number of available licenses.</p>"
        }
    },
    "LicenseCountHardLimit": {
        "target": "com.amazonaws.licensemanager#BoxBoolean",
        "traits": {
            "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
        }
    },
    "ConsumedLicenses": {
        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
            "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
        }
    },
    "Status": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>License configuration status.</p>"
        }

},
    "OwnerAccountId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
        }
    },
    "ConsumedLicenseSummaryList": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
        "traits": {
            "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
        }
    },
    "ManagedResourceSummaryList": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
        "traits": {
            "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
        }
    },
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```
            "Tags": {
              "target": "com.amazonaws.licensemanager#TagList",
               "traits": {
                 "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
              }
            },
            "ProductInformationList": {
              "target": "com.amazonaws.licensemanager#ProductInformationList",
              "traits": {
                 "smithy.api#documentation": "<p>Product information.</p>"
              }
            },
            "AutomatedDiscoveryInformation": {
              "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
              "traits": {
                 "smithy.api#documentation": "<p>Automated discovery information.</p>"
              }
            },
            "DisassociateWhenNotFound": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                 "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#GetLicenseConversionTask": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
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            {

 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information
on.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
     },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information
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about the license type converted from.</p>"
                }
            },
            "DestinationLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
                }
            },

  "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
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```
{
        "type": "operation",
        "input": {
           "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
           "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
           {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
           },
           {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
           },
           {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
           {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
           },
           {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

         },
           {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
           },
           {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
           },
           {
              "target": "com.amazonaws.licensemanager#ValidationException"
           }
        ],
        "traits": {
           "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
     },
     "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
           "LicenseManagerReportGeneratorArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                 "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                 "smithy.api#required":
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{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {

 "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
```

```
        "License": {
          "target": "com.amazonaws.licensemanager#License",
          "traits": {
            "smithy.api#documentation": "<p>License details.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },

"com.amazonaws.licensemanager#GetLicenseUsage": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {

"target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
      }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
      "type": "structure",
      "members": {
```

```
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
        "type": "structure",
        "members": {
            "LicenseUsage": {
                "target":
"com.amazonaws.licensemanager#LicenseUsage",
                "traits": {
                    "smithy.api#documentation": "<p>License usage details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n         and so on.</p>"

 }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n         cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
                }

        },
            "LicenseManagerResourceShareArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
```

```
Manager management account \n        provides member accounts with access to this share.</p>"
                }
              }
            },
            "traits": {
              "smithy.api#output": {}
            }
          },
          "com.amazonaws.licensemanager#Grant": {
            "type": "structure",
            "members": {
              "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                  "smithy.api#required": {}
                }
              },
              "GrantName": {

 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                  "smithy.api#documentation": "<p>Grant name.</p>",
                  "smithy.api#required": {}
                }
              },
              "ParentArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                  "smithy.api#documentation": "<p>Parent ARN.</p>",
                  "smithy.api#required": {}
                }
              },
              "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                  "smithy.api#documentation": "<p>License ARN.</p>",
                  "smithy.api#required": {}
                }
              },
              "GranteePrincipalArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {

"smithy.api#documentation": "<p>The grantee principal ARN.</p>",
                  "smithy.api#required": {}
                }
              },
```

```
            "HomeRegion": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                "smithy.api#required": {}
              }
            },
            "GrantStatus": {
              "target": "com.amazonaws.licensemanager#GrantStatus",
              "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>",
                "smithy.api#required": {}
              }
            },
            "StatusReason": {
              "target": "com.amazonaws.licensemanager#StatusReasonMessage",
              "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
               }
            },
            "Version": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>",
                "smithy.api#required": {}
              }
            },
            "GrantedOperations": {
              "target": "com.amazonaws.licensemanager#AllowedOperationList",
              "traits": {
                "smithy.api#documentation": "<p>Granted operations.</p>",
                "smithy.api#required": {}
              }
            },
            "Options": {
              "target": "com.amazonaws.licensemanager#Options",
              "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation":
"<p>Describes a grant.</p>"
          }
        },
        "com.amazonaws.licensemanager#GrantList": {
          "type": "list",
```

```
    "member": {
      "target": "com.amazonaws.licensemanager#Grant"
    }
  },
  "com.amazonaws.licensemanager#GrantStatus": {
    "type": "enum",
    "members": {
      "PENDING_WORKFLOW": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PENDING_WORKFLOW"
        }
      },
      "PENDING_ACCEPT": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PENDING_ACCEPT"
        }
      },
      "REJECTED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "REJECTED"

      }
      },
      "ACTIVE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "ACTIVE"
        }
      },
      "FAILED_WORKFLOW": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "FAILED_WORKFLOW"
        }
      },
      "DELETED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "DELETED"
        }
      },
      "PENDING_DELETE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PENDING_DELETE"
```

```
            }
          },
          "DISABLED": {
            "target": "smithy.api#Unit",
            "traits":
{
              "smithy.api#enumValue": "DISABLED"
            }
          },
          "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>"
            }

  },
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product name.</p>"
            }
          },
          "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product SKU.</p>"
            }
          },
          "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
```

```
            "smithy.api#documentation": "<p>Granted license issuer.</p>"
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

         }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseStatus",
          "traits": {
            "smithy.api#documentation": "<p>Granted license status.</p>"
          }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
          }
        },
        "Beneficiary": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
          }
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
           "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>"
          }
        },
        "ConsumptionConfiguration": {
          "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
          }
        },
        "LicenseMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
            "smithy.api#documentation": "<p>Granted license metadata.</p>"
          }
        },
        "CreateTime": {
```

```
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

  }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Version of the granted license.</p>"
          }
        },
        "ReceivedMetadata": {
          "target": "com.amazonaws.licensemanager#ReceivedMetadata",
          "traits": {
            "smithy.api#documentation": "<p>Granted license received metadata.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
      }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#GrantedLicense"
      }
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
      }
    },
    "com.amazonaws.licensemanager#Integer": {
      "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
      "type": "structure",
      "members": {
        "Message": {
```

```
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "InvalidParameterValueProvided",
            "httpResponseCode": 400
          },
          "smithy.api#documentation":
 "<p>One or more parameter values are not valid.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },
      "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "InvalidResourceState",
            "httpResponseCode": 400
          },
          "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n         <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },

      "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the filter.</p>",
              "smithy.api#required": {}
            }
          },
          "Condition": {
            "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
            "traits": {
              "smithy.api#documentation": "<p>Condition of the filter.</p>",
```

```
            "smithy.api#required": {}
          }
        },
        "Value": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Value of the filter.</p>"
          }
        }

},
    "traits": {
      "smithy.api#documentation": "<p>An inventory filter.</p>"
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
      "EQUALS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EQUALS"
        }
      },
      "NOT_EQUALS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "NOT_EQUALS"
        }
      },
      "BEGINS_WITH": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "BEGINS_WITH"
        }
      },
      "CONTAINS": {
        "target": "smithy.api#Unit",
        "traits": {
           "smithy.api#enumValue": "CONTAINS"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#InventoryFilter"
```

```
        }
      },
      "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Issuer name.</p>",
              "smithy.api#required": {}
            }
          },
          "SignKey": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
      },
      "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Issuer name.</p>"
            }
          },
          "SignKey": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
            }
          },
          "KeyFingerprint": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
            }
          }
```

```
    },
    "traits": {
      "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
    }
  },
  "com.amazonaws.licensemanager#License": {
    "type": "structure",
    "members": {
      "LicenseArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
        }
      },
      "LicenseName": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {

       "smithy.api#documentation": "<p>License name.</p>"
        }
      },
      "ProductName": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Product name.</p>"
        }
      },
      "ProductSKU": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Product SKU.</p>"
        }
      },
      "Issuer": {
        "target": "com.amazonaws.licensemanager#IssuerDetails",
        "traits": {
          "smithy.api#documentation": "<p>License issuer.</p>"
        }
      },
      "HomeRegion": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {

      "smithy.api#documentation": "<p>Home Region of the license.</p>"
        }
      },
      "Status": {
        "target": "com.amazonaws.licensemanager#LicenseStatus",
```

```
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>"
            }
        },
        "Entitlements": {

  "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>License metadata.</p>"
            }
        },
        "CreateTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>License
 creation time.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
```

```
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
      }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
      "type": "structure",
      "members": {
        "LicenseConfigurationId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
          }
        },
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
          }
        },
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the license configuration.</p>"
          }
        },
        "Description": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Description of the license configuration.</p>"
          }
        },
        "LicenseCountingType": {
          "target": "com.amazonaws.licensemanager#LicenseCountingType",
          "traits": {
            "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
           }
        },
        "LicenseRules": {
          "target": "com.amazonaws.licensemanager#StringList",
          "traits": {
            "smithy.api#documentation": "<p>License rules.</p>"
          }
        },
        "LicenseCount": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
```

```
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
              }
            },
            "LicenseCountHardLimit": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
              }
            },
            "DisassociateWhenNotFound": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
               "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
              }
            },
            "ConsumedLicenses": {
              "target": "com.amazonaws.licensemanager#BoxLong",
              "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Status of the license configuration.</p>"
              }
            },
            "OwnerAccountId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

           }
            },
            "ConsumedLicenseSummaryList": {
              "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
              }
            },
            "ManagedResourceSummaryList": {
              "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
              }
            },
            "ProductInformationList": {
```

```
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>Product information.</p>"
            }
          },
          "AutomatedDiscoveryInformation": {

            "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
            "traits": {
              "smithy.api#documentation": "<p>Automated discovery information.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
        "type": "structure",
        "members": {
          "ResourceArn":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Type of server resource.</p>"
            }
          },
          "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource consuming licenses.</p>"
            }
          },
          "AssociationTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
```

```
    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members":
{
            "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
```

```
            "ResourceType": {
               "target": "com.amazonaws.licensemanager#ResourceType",
               "traits":
{
                  "smithy.api#documentation": "<p>Type of resource.</p>"
               }
            },
            "ResourceStatus": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Status of the resource.</p>"
               }
            },
            "ResourceOwnerId": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
               }
            },
            "AssociationTime": {
               "target": "com.amazonaws.licensemanager#DateTime",
               "traits": {
                  "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
               }
            },

      "ConsumedLicenses": {
               "target": "com.amazonaws.licensemanager#BoxLong",
               "traits": {
                  "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license
configuration.</p>"
         }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
         }
      },
      "com.amazonaws.licensemanager#LicenseConfigurations": {
         "type": "list",
         "member": {
```

```
            "target": "com.amazonaws.licensemanager#LicenseConfiguration"
          }
        },
        "com.amazonaws.licensemanager#LicenseConversionContext": {

  "type": "structure",
          "members": {
            "UsageOperation": {
              "target": "com.amazonaws.licensemanager#UsageOperation",
              "traits": {
                "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from.  For more information about which platforms correspond to which usage
operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n         </p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
          }
        },
        "com.amazonaws.licensemanager#LicenseConversionTask": {
          "type": "structure",
          "members": {
            "LicenseConversionTaskId": {

       "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
              }
            },
            "ResourceArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n         conversion task.</p>"
              }
            },
            "SourceLicenseContext": {
              "target": "com.amazonaws.licensemanager#LicenseConversionContext",
              "traits": {
                "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
              }
            },
            "DestinationLicenseContext": {
              "target":
```

```
 "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the conversion task.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
                }
            },
            "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskId": {
        "type": "string",
        "traits": {
```

```
        "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
      }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
      "type": "enum",
      "members": {
        "IN_PROGRESS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "IN_PROGRESS"
          }
        },
        "SUCCEEDED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "SUCCEEDED"
          }
        },
        "FAILED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "FAILED"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTask"
      }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
      "type": "enum",
      "members": {
        "VCPU": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "vCPU"
          }
        },
        "INSTANCE": {
          "target": "smithy.api#Unit",
```

```
            "traits": {
                "smithy.api#enumValue": "Instance"
            }
        },
        "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Core"
            }
        },
        "SOCKET": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Socket"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#License"
    }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

    "type": "structure",
    "members": {
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
              }
            },
            "ResourceType": {
              "target": "com.amazonaws.licensemanager#ResourceType",
              "traits": {
                "smithy.api#documentation": "<p>Resource type.</p>"
              }
            },
            "ErrorMessage": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Error message.</p>"
              }
            },
            "FailureTime": {
              "target": "com.amazonaws.licensemanager#DateTime",
              "traits": {

        "smithy.api#documentation": "<p>Failure time.</p>"
              }
            },
            "OperationName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Name of the operation.</p>"
              }
            },
            "ResourceOwnerId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
              }
            },
            "OperationRequestedBy": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
              }
            },
            "MetadataList": {

              "target": "com.amazonaws.licensemanager#MetadataList",
              "traits": {
                "smithy.api#documentation": "<p>Reserved.</p>"
              }
            }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailureList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecification": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

                  "smithy.api#required": {}
                  }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecifications": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseSpecification"
        }
    },
    "com.amazonaws.licensemanager#LicenseStatus": {
        "type": "enum",
        "members": {
            "AVAILABLE": {
                "target": "smithy.api#Unit",
```

```
        "traits": {
            "smithy.api#enumValue": "AVAILABLE"
          }
        },
        "PENDING_AVAILABLE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "PENDING_AVAILABLE"
          }
        },
        "DEACTIVATED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DEACTIVATED"
          }
        },
        "SUSPENDED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "SUSPENDED"
          }
        },
        "EXPIRED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EXPIRED"
          }
        },

      "PENDING_DELETE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "PENDING_DELETE"
          }
        },
        "DELETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DELETED"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#LicenseUsage": {
      "type": "structure",
      "members": {
        "EntitlementUsages": {
          "target": "com.amazonaws.licensemanager#EntitlementUsageList",
```

```
            "traits": {
              "smithy.api#documentation": "<p>License entitlement usages.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

        }
      },
      "com.amazonaws.licensemanager#LicenseUsageException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "LicenseUsageFailure",
            "httpResponseCode": 412
          },
          "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 412
        }
      },
      "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {

      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
          },
          {
```

```
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results
 to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationAssociations": {
```

```
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
            "traits": {
              "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
            }
          },
          "NextToken": {

 "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListDistributedGrants": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
```

```
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
          "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {

          "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n
  <li>\n            <p>\n              <code>GranteePrincipalARN</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>LicenseIssuerName</code>\n
        </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
        "type": "structure",
        "members": {
          "Grants": {
```

```
            "target": "com.amazonaws.licensemanager#GrantList",

    "traits": {
                "smithy.api#documentation": "<p>Distributed grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
      },
      "errors": [
        {

"target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
```

```
      "type": "structure",
      "members": {
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
      "type": "structure",
      "members": {
        "LicenseOperationFailureList": {
          "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
          "traits": {
            "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
```

```
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
```

```
            },
            "NextToken": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanager#Filters",
               "traits": {
                  "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n        <li>\n        <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n        Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n        Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n        </li>\n        <li>\n
<p>\n        <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n        Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
   </li>\n        <li>\n        <p>\n        <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n        Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n        </li>\n        </ul>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
         "type": "structure",
         "members": {
            "LicenseConfigurations": {
               "target": "com.amazonaws.licensemanager#LicenseConfigurations",
               "traits": {
                  "smithy.api#documentation": "<p>Information about the license configurations.</p>"
               }
            },
            "NextToken": {
               "target": "com.amazonaws.licensemanager#String",

             "traits": {
                  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
```

```
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
       },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      },
      "MaxResults": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {

"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      },
      "Filters": {
```

```
            "target": "com.amazonaws.licensemanager#Filters",
            "traits": {
              "smithy.api#documentation": "<p>\n         Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTasks": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target":
"com.amazonaws.licensemanager#AuthorizationException"
          },
```

```
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
          "type": "structure",
          "members": {
            "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n          <li>\n            <p>\n              <code>LicenseConfigurationArn</code>\n
</p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits":
{
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            }
```

```
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
          "ReportGenerators": {
            "target": "com.amazonaws.licensemanager#ReportGeneratorList",
            "traits": {
              "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license configurations.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }

        }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#BoxInteger",
              "traits": {

           "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
          "type": "structure",
          "members": {
            "LicenseSpecifications": {
              "target": "com.amazonaws.licensemanager#LicenseSpecifications",
              "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
              }
            },
            "NextToken": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
```

```
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
           "traits": {
             "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
             "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
      "type": "structure",
      "members": {
        "Licenses": {
          "target": "com.amazonaws.licensemanager#LicenseList",
          "traits": {
             "smithy.api#documentation": "<p>License details.</p>"
          }
        },

"NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
             "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenses": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListLicensesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListLicensesResponse"
      },
      "errors": [
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```
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListLicensesRequest": {
          "type": "structure",
          "members": {
            "LicenseArns": {
              "target": "com.amazonaws.licensemanager#ArnList",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
              }
            },

          "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n
    <li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>Status</code>\n            </p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token
```

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for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
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            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while specifying the\n          recipient as this Amazon Web Services account, your organization, or an organizational unit\n      (OU) to which this member account belongs.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
```

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n          <li>\n              <p>\n                  <code>ParentArn</code>\n              </p>\n          </li>\n
<li>\n              <p>\n                  <code>GranteePrincipalArn</code>\n              </p>\n          </li>\n      </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

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    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
      "type": "structure",
      "members": {
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",
          "traits": {
            "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
      "type": "structure",
      "members": {
        "GrantArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n      <ul>\n        <li>\n          <p>\n            <code>ProductSKU</code>\n          </p>\n
      </li>\n        <li>\n          <p>\n            <code>LicenseIssuerName</code>\n          </p>\n
</li>\n        <li>\n          <p>\n            <code>LicenseArn</code>\n          </p>\n        </li>\n
<li>\n          <p>\n            <code>GrantStatus</code>\n          </p>\n        </li>\n        <li>\n
<p>\n
      <code>GranterAccountId</code>\n          </p>\n        </li>\n      </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
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        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
      "type": "structure",
      "members": {
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",
           "traits": {
            "smithy.api#documentation": "<p>Received grant details.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedLicenses": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
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```
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n
          </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
             "traits": {
              "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
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```
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
          "type": "structure",
          "members": {
            "LicenseArns": {
              "target": "com.amazonaws.licensemanager#ArnList",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
              }
            },

           "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>Status</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>IssuerName</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Beneficiary</code>\n            </p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
               "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
          "type": "structure",
```

```
    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#GrantedLicenseList",
        "traits": {
          "smithy.api#documentation": "<p>Received license details.</p>"
        }
      },

      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
         "target": "com.amazonaws.licensemanager#FailedDependencyException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
```

```
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
          "type": "structure",
          "members": {
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#BoxInteger",
               "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#InventoryFilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n       are supported:</p>\n       <ul>\n       <li>\n       <p>\n       <code>account_id</code>
- The ID of the Amazon Web Services account that owns the resource.\n       Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
         </li>\n         <li>\n         <p>\n         <code>application_name</code> - The name of the
application. \n         Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n
  </li>\n         <li>\n         <p>\n         <code>license_included</code> - The type of license included. \n
         Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n         Possible values
are <code>sql-server-enterprise</code> | \n         <code>sql-server-standard</code> | \n         <code>sql-
server-web</code> |  \n         <code>windows-server-datacenter</code>.</p>\n         </li>\n         <li>\n
  <p>\n         <code>platform</code> - The platform of the resource.\n         Logical operators are
<code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n         </li>\n         <li>\n         <p>\n
      <code>resource_id</code> - The ID of the resource. \n         Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n         </li>\n         <li>\n         <p>\n
    <code>tag:<key></code> - The key/value combination of a tag assigned \n         to the resource. Logical
operators are <code>EQUALS</code> (single account) or\n         <code>EQUALS</code> |
<code>NOT_EQUALS</code> (cross account).</p>\n         </li>\n       </ul>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
```

```
    "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
      "type": "structure",
      "members": {
        "ResourceInventoryList": {
          "target": "com.amazonaws.licensemanager#ResourceInventoryList",
          "traits": {
            "smithy.api#documentation": "<p>Information
about the resources.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListTagsForResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

      "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>Information about the tags.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListTokensRequest": {
          "type": "structure",
          "members": {
            "TokenIds": {
              "target": "com.amazonaws.licensemanager#StringList",
              "traits": {

                "smithy.api#documentation": "<p>Token IDs.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n          <li>\n          <p>\n          <code>LicenseArns</code>\n          </p>\n          </li>\n
</ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits": {
                "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
              }
            }
          },
          "traits": {
```

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            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

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            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n            consumption details by resource at a selected point in time. Use this action to audit the\n            current license consumption for any license inventory and configuration.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
          "type": "structure",
          "members": {
            "LicenseConfigurationArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#Filters",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n              are supported:</p>\n              <ul>\n                <li>\n                  <p>\n                    <code>resourceArn</code> - The ARN of the license configuration resource.\n                    Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n                </li>\n                <li>\n                  <p>\n                    <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                    Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n                </li>\n                <li>\n                  <p>\n                    <code>resourceAccount</code> - The ID of the account that owns the resource. \n                    Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n                </li>\n              </ul>"
              }
            }
```

```
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

"LicenseConfigurationUsageList": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#Location": {
        "type": "string"
      },
      "com.amazonaws.licensemanager#Long": {
        "type": "long"
      },
      "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
          "ResourceType":
{
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
            }
          },
          "AssociationCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
            }
          }
```

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    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
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            "traits": {
              "smithy.api#documentation": "<p>The value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
        }
      },
      "com.amazonaws.licensemanager#MetadataList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Metadata"
        }
      },
      "com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement maximum count is reached.</p>",
           "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },
      "com.amazonaws.licensemanager#Options": {
        "type": "structure",
        "members": {
          "ActivationOverrideBehavior": {
            "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
            "traits": {
              "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter.</p>\n <ul>\n <li>\n <p>As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n </li>\n <li>\n <p>As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization.</p>\n </li>\n <li>\n <p>As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant.</p>\n </li>\n </ul>\n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n <p>Use this value to activate a grant without replacing any member accounts\n active grants for the same product.</p>\n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n <p>Use this value to activate a
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grant and disable other active grants in any\n                member accounts
 for the same product. This action will also replace their\n                previously activated grants with this activated
grant.</p>\n            </dd>\n        </dl>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant,
such as activation\n        override behavior. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in
License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#OrganizationConfiguration": {
        "type": "structure",
        "members": {
            "EnableIntegration": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation":
 "<p>Enables Organizations integration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
    },
    "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 1
            }
        }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

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                "smithy.api#documentation": "<p>Resource type. The
 possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
                "smithy.api#required": {}
              }
            },
            "ProductInformationFilterList": {
              "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
              "traits": {
                "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n          <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n          <p>The following filters and are supported when
the resource type \n          is <code>SSM_MANAGED</code>:</p>\n
        <ul>\n          <li>\n            <p>\n              <code>Application Name</code> - The name of the
application.\n              Logical operator is <code>EQUALS</code>.</p>\n          </li>\n          <li>\n
<p>\n              <code>Application Publisher</code> - The publisher of the application.\n              Logical
operator is <code>EQUALS</code>.</p>\n          </li>\n          <li>\n            <p>\n
<code>Application Version</code> - The version of the application.\n              Logical operator is
<code>EQUALS</code>.</p>\n          </li>\n          <li>\n            <p>\n              <code>Platform
Name</code> - The name of the platform.\n              Logical operator is <code>EQUALS</code>.</p>\n
</li>\n          <li>\n            <p>\n              <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
        </li>\n          <li>\n            <p>\n              <code>Tag:key</code> - The key of a tag attached to an
Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>.  The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key.\n              </p>\n          </li>\n          <li>\n            <p>\n
<code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from
automated discovery.\n              Logical operator is <code>NOT_EQUALS</code>.</p>\n          </li>\n
<li>\n            <p>\n              <code>License Included</code> - The type of license included.\n              Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n              Possible values are:
 <code>sql-server-enterprise</code> | \n              <code>sql-server-standard</code> | \n              <code>sql-server-
web</code> |  \n              <code>windows-server-datacenter</code>.</p>\n          </li>\n        </ul>\n
<p>The following filters and logical operators are supported when the resource type\n          is
<code>RDS</code>:</p>\n          <ul>\n            <li>\n              <p>\n                <code>Engine Edition</code> -
The edition of the database engine.\n              Logical operator is <code>EQUALS</code>.\n              Possible
values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code>.</p>\n          </li>\n          <li>\n            <p>\n              <code>License Pack</code> - The license
pack.\n              Logical operator is <code>EQUALS</code>.\n              Possible values are: <code>data
guard</code> | \n              <code>diagnostic pack sqlt</code> | \n
            <code>tuning pack sqlt</code> | \n              <code>ols</code> | \n              <code>olap</code>.</p>\n
    </li>\n        </ul>",
                "smithy.api#required": {}
              }
            }
          },
```

```
    "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
```

```
            "MaxTimeToLiveInMinutes": {
               "target": "com.amazonaws.licensemanager#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
         }
      },
      "com.amazonaws.licensemanager#RateLimitExceededException": {
         "type": "structure",
         "members": {
            "Message": {
               "target": "com.amazonaws.licensemanager#Message"
            }
         },
         "traits": {
            "aws.protocols#awsQueryError": {
               "code": "RateLimitExceeded",
               "httpResponseCode": 429
            },
            "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 429
         }
      },
      "com.amazonaws.licensemanager#ReceivedMetadata": {
         "type": "structure",
         "members": {
            "ReceivedStatus": {
               "target": "com.amazonaws.licensemanager#ReceivedStatus",
               "traits": {
                  "smithy.api#documentation": "<p>Received status.</p>"
               }
            },
            "ReceivedStatusReason": {
               "target": "com.amazonaws.licensemanager#StatusReasonMessage",
               "traits": {
                  "smithy.api#documentation": "<p>Received
 status reason.</p>"
               }
            },
            "AllowedOperations": {
               "target": "com.amazonaws.licensemanager#AllowedOperationList",
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            "traits": {
              "smithy.api#documentation": "<p>Allowed operations.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
        }
      },
      "com.amazonaws.licensemanager#ReceivedStatus": {
        "type": "enum",
        "members": {
          "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
          },
          "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue":
"PENDING_ACCEPT"
            }
          },
          "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "REJECTED"
            }
          },
          "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ACTIVE"
            }
          },
          "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
          },
          "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
```

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        },
        "DISABLED": {
          "target": "smithy.api#Unit",
           "traits": {
             "smithy.api#enumValue": "DISABLED"
          }
        },
        "WORKFLOW_COMPLETED": {
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "WORKFLOW_COMPLETED"
          }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",
    "members": {
        "Location": {
          "target": "com.amazonaws.licensemanager#Location",
          "traits": {
             "smithy.api#httpHeader": "Location"
          }
        },
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
         "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#RejectGrantResponse"
    },
    "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
```

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            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
          }
        },
        "com.amazonaws.licensemanager#RejectGrantRequest": {
          "type": "structure",
          "members": {
            "GrantArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}

  }
        },
        "com.amazonaws.licensemanager#RejectGrantResponse": {
          "type": "structure",
          "members": {
            "GrantArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
              }
            },
            "Status": {
```

```
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Weekly"
            }
          },
          "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Monthly"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ReportContext": {
        "type": "structure",
        "members": {
          "licenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
```

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        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this generator reports on.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportFrequency": {
        "type": "structure",
        "members": {
            "value": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
                    "smithy.api#documentation": "<p>Number of times within the frequency period that a report is generated.  \n         The only supported value is <code>1</code>.</p>"
                }
            },
            "period": {
                "target": "com.amazonaws.licensemanager#ReportFrequencyType",

              "traits": {
                    "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly, or monthly.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportFrequencyType": {
        "type": "enum",
        "members": {
            "DAY": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DAY"
                }
            },
            "WEEK": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WEEK"
                }
            },
```

```
            "MONTH": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "MONTH"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>"
                }
            },
            "ReportType": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
                "traits": {
                    "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
                }
            },
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
                }
            },
            "LastRunStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
                }
```

```
        },
        "LastRunFailureReason":
{
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
          }
        },
        "LastReportGenerationTime": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
          }
        },
        "ReportCreatorAccount": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
          }
        },
        "Description": {
          "target": "com.amazonaws.licensemanager#String",

      "traits": {
            "smithy.api#documentation": "<p>Description of the report generator.</p>"
          }
        },
        "S3Location": {
          "target": "com.amazonaws.licensemanager#S3Location",
          "traits": {
            "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
          }
        },
        "CreateTime": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Time the report was created.</p>"
          }
        },
        "Tags": {
          "target": "com.amazonaws.licensemanager#TagList",
          "traits": {
            "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
          }
```

```
}
    },
    "traits": {
        "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
    }
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportGenerator"
    }
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#ReportType": {
    "type": "enum",
    "members": {
        "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
            }

},
        "LICENSE_CONFIGURATION_USAGE_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "LicenseConfigurationUsageReport"
            }
        }
    }
},
"com.amazonaws.licensemanager#ReportTypeList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportType"
    }
},
"com.amazonaws.licensemanager#ResourceInventory": {
    "type": "structure",
    "members": {
```

```
            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "Platform": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform of the resource.</p>"
                }
            },
            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventoryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ResourceInventory"
        }
```

```
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
   "type": "structure",
   "members": {
      "Message": {
         "target": "com.amazonaws.licensemanager#Message"
      }
   },
   "traits": {
      "aws.protocols#awsQueryError": {
         "code": "ResourceLimitExceeded",

       "httpResponseCode": 400
      },
      "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
   }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
   "type": "structure",
   "members": {
      "Message": {
         "target": "com.amazonaws.licensemanager#Message"
      }
   },
   "traits": {
      "aws.protocols#awsQueryError": {
         "code": "InvalidResource.NotFound",
         "httpResponseCode": 400
      },
      "smithy.api#documentation": "<p>The resource cannot be found.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
   }
},
"com.amazonaws.licensemanager#ResourceType": {
   "type": "enum",
    "members": {
      "EC2_INSTANCE": {
         "target": "smithy.api#Unit",
         "traits": {
            "smithy.api#enumValue": "EC2_INSTANCE"
         }
      },
      "EC2_HOST": {
         "target": "smithy.api#Unit",
         "traits": {
```

```
                "smithy.api#enumValue": "EC2_HOST"
              }
            },
            "EC2_AMI": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "EC2_AMI"
              }
            },
            "RDS": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "RDS"
              }
            },
            "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
              "target": "smithy.api#Unit",
              "traits": {
                 "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#S3Location": {
          "type": "structure",
          "members": {
            "bucket": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
              }
            },
            "keyPrefix": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
          }
         },
        "com.amazonaws.licensemanager#ServerInternalException": {
          "type": "structure",
          "members": {
            "Message": {
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            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "InternalError",
            "httpResponseCode": 500
          },
          "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
          "smithy.api#error": "server",
          "smithy.api#httpError": 500
        }
      },
      "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 4096
          }
        }
      },
      "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits":
{
          "smithy.api#length": {
            "min": 0,
            "max": 400
          },
          "smithy.api#pattern": "^[\\s\\S]+$"
        }
      },
      "com.amazonaws.licensemanager#String": {
        "type": "string"
      },
      "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
          "Key": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Tag key.</p>"
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            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Tag value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Tag"
        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
          {
            "target":
"com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
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            "TokenType": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
              }
            },
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
              }
            },
            "ExpirationTime": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
 format.</p>"
              }
            },
            "TokenProperties": {
              "target": "com.amazonaws.licensemanager#MaxSize3StringList",
              "traits": {
                "smithy.api#documentation": "<p>Data specified by the caller.</p>"
              }
            },
            "RoleArns": {
              "target": "com.amazonaws.licensemanager#ArnList",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
              }
            }
          },
          "traits": {

            "smithy.api#documentation": "<p>Describes a token.</p>"
          }
        },
        "com.amazonaws.licensemanager#TokenList": {
          "type": "list",
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        "member": {
          "target": "com.amazonaws.licensemanager#TokenData"
        }
      },
      "com.amazonaws.licensemanager#TokenString": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 4096
          },
          "smithy.api#pattern": "^\\S+$"
        }
      },
      "com.amazonaws.licensemanager#TokenType": {
        "type": "enum",
        "members": {
          "REFRESH_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "REFRESH_TOKEN"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },
      "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
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        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanager#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UntagResourceResponse": {
        "type": "structure",
        "members": {},
```

```
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
        },
        "output": {

 "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
         }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
```

```
            "LicenseConfigurationStatus": {
               "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
               "traits": {
                  "smithy.api#documentation": "<p>New status of the license configuration.</p>"
               }
            },
            "LicenseRules": {
               "target": "com.amazonaws.licensemanager#StringList",
               "traits": {

 "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
 configuration is licenseAffinityToHost.</p>"
               }
            },
            "LicenseCount": {
               "target": "com.amazonaws.licensemanager#BoxLong",
               "traits": {
                  "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
               }
            },
            "LicenseCountHardLimit": {
               "target": "com.amazonaws.licensemanager#BoxBoolean",
               "traits": {
                  "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
               }
            },
            "Name": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>New name
 of the license configuration.</p>"
               }
            },
            "Description": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>New description of the license configuration.</p>"
               }
            },
            "ProductInformationList": {
               "target": "com.amazonaws.licensemanager#ProductInformationList",
               "traits": {
                  "smithy.api#documentation": "<p>New product information.</p>"
               }
            },
            "DisassociateWhenNotFound": {
               "target": "com.amazonaws.licensemanager#BoxBoolean",
```

```
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
          }
        },
        "traits":
{
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n        <li>\n        <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n        </li>\n        <li>\n        <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n        </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>The report context.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
```

```
            "traits":
{
                "smithy.api#documentation": "<p>Frequency by which reports are generated.</p>",
                "smithy.api#required": {}
            }
        },
        "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientRequestToken",
            "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                "smithy.api#required": {}
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
```

```
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
              "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
              "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n          <p>You can update the license specifications of AMIs, instances, and
hosts.\n          You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
          }
        },

        "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                "smithy.api#required": {}
              }
            },
            "AddLicenseSpecifications": {
              "target": "com.amazonaws.licensemanager#LicenseSpecifications",
              "traits": {
                "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
              }
            },
            "RemoveLicenseSpecifications": {
              "target": "com.amazonaws.licensemanager#LicenseSpecifications",
              "traits": {
                "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
              }
```

```
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
        "S3BucketArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
              }
            },
            "SnsTopicArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
              }
            },
            "OrganizationConfiguration": {
              "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
              "traits": {
                "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
              }
            },
            "EnableCrossAccountsDiscovery": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"

        }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#UsageOperation": {
          "type": "string",
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 50
            }
          }
        },
        "com.amazonaws.licensemanager#ValidationException": {
```

```
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

       "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      }
    }
  }
CheckoutLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
```

AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.104 aws-sdk-go-v2-internal-endpoints 2.6.34

1.104.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {
```

```
 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
```

```
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
```

ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming

```
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
```

```
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {
```

```
// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus

// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err
 = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
```

```
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
```

```
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
```

```
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
```

```
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
```

```
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string
```

```
 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
```

```
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
```

```
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
```

spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID

ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd

```
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
```

```
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
```

```
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
```

```
 return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go
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AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
```

```
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
```

```
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
     "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
        "type": "integer"
     },
     "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
        "type": "long"
     },
     "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
        "type": "operation",
        "input": {
           "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
        },
        "output": {
           "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
        },
        "errors": [
           {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
           },
           {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
           },
```

```
    {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/DeregisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of name to filter by.</p>"
```

```
            }
          },
          "Values": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
            }
          },
          "Operator": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
            "traits": {
              "smithy.api#documentation": "<p>An operator for filtering results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
                    "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource specified \n\t\t\tin the request.</p>"
                }
            },
            "SecretArn": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
```

```
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
               "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
          "AmiId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
          },
          "Region": {
            "target": "smithy.api#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
        },
        "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
                "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
        },
        "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
        },
        "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
        },
        "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
            }
        },
        "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
        },
```

```
            "SubscriptionProviderUpdateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
               }
            },
            "DualSubscription": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
               }
            },
            "RegisteredWithSubscriptionProvider": {
               "target": "smithy.api#String",
               "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
```

```
"type": "service",
"version": "2018-05-10",
"operations": [
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
     },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
],
"traits": {
    "aws.api#service": {
        "sdkId": "License Manager Linux Subscriptions",
         "arnNamespace": "license-manager-linux-subscriptions",
        "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
        "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
```

```
            "additionalAllowedHeaders": [
              "*",
              "content-type",
              "x-amz-content-sha256",
              "x-amz-user-agent",
              "x-amzn-platform-id",
              "x-amzn-trace-id"
            ],
            "additionalExposedHeaders": [
              "x-amzn-errortype",
              "x-amzn-requestid",
              "x-amzn-trace-id"
            ]
          },
          "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
          "smithy.api#title": "AWS License Manager Linux Subscriptions",
          "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
              "Region": {
                "builtIn": "AWS::Region",
                "required": false,
                "documentation": "The AWS region used to dispatch the request.",
                "type": "String"
              },
              "UseDualStack": {
                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
                 "type": "Boolean"
              },
              "UseFIPS": {
                "builtIn": "AWS::UseFIPS",
                "required": true,
                "default": false,
                "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                "type": "Boolean"
              },
              "Endpoint": {
                "builtIn": "SDK::Endpoint",
                "required": false,
                "documentation": "Override the endpoint used to send this request",
                "type": "String"
              }
```

```
        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }

    ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]

}
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
```

```
            },
            {
              "conditions": [],
              "endpoint": {
                "url": {
                  "ref": "Endpoint"
                },
                "properties": {},
                "headers": {}
              },
              "type": "endpoint"
            }
          ],
          "type": "tree"

    }
    ],
    "type": "tree"
  },
  {
    "conditions": [],
    "rules": [
      {
        "conditions": [
          {
            "fn": "isSet",
            "argv": [
              {
                "ref": "Region"
              }
            ]
          }
        ],
        "rules": [
          {
            "conditions": [
              {

    "fn": "aws.partition",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ],
                "assign": "PartitionResult"
              }
            ],
            "rules": [
```

```
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {

                    "ref": "UseFIPS"
                        },
                        true
                      ]
                    },
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseDualStack"
                        },
                        true
                      ]
                    }

],
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
                              "argv": [
                                {
                                  "ref": "PartitionResult"

            },
                                "supportsFIPS"
                              ]
                            }
                          ]
                        },
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
```

```
                                        "argv": [

                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                        ]
                                    }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],

    "rules": [
                                    {
                                        "conditions": [],
                                        "endpoint": {
                                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
                                ],

                    "type": "tree"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",

                            "type": "error"
                        }
                    ],
                    "type": "tree"
                },
                {

        "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
```

```
                {
                  "ref": "UseFIPS"
                },
                true
              ]
            }
          ],
          "rules": [
            {
              "conditions": [
                {

        "fn": "booleanEquals",
                  "argv": [
                    {
                      "fn": "getAttr",
                      "argv": [
                        {
                          "ref": "PartitionResult"
                        },
                        "supportsFIPS"
                      ]
                    },
                    true

                ]
                }
              ],
              "rules": [
                {
                  "conditions": [],
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }
                  ],
                  "type": "tree"
                }
              ],
              "type": "tree"
```

```
                },
                {
                  "conditions": [],
                  "error": "FIPS is enabled
but this partition does not support FIPS",
                  "type": "error"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true

          ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {

                              "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                          ]
                        }
                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [],
                      "rules": [
```

```
        {
                                                "conditions": [],
                                                "endpoint": {
                                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                    "properties": {},
                                                    "headers": {}
                                                },
                                                "type": "endpoint"
                                            }
                                        ],
                                        "type": "tree"

                                }
                                    ],
                                    "type": "tree"
                                },
                                {
                                    "conditions": [],
                                    "error": "DualStack is enabled but this partition does not support DualStack",
                                    "type": "error"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
```

```
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
              }
            ],
            "type": "tree"
          }
        ]
      },
      "smithy.rules#endpointTests": {
        "testCases": [
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {

         "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-east-1",
```

```
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
            }

      },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
```

```
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }

      },
      "params": {
        "Region": "us-gov-east-1",
```

```
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {

    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {

        "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
```

```
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS":
false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
```

```
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {

          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }

    },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
```

```
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {

      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
      },
      "params": {

 "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "Missing region",
      "expect": {
        "error": "Invalid Configuration: Missing Region"
      }
    }
```

```
            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled LinuxSubscriptionsDiscovery"

     },
            {
              "name": "Disabled",
              "value": "Disabled",
              "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
        "type": "structure",
        "members": {
          "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
              "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
```

```
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },

  {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptionInstances"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "Instances"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n          <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n          <ul>\n            <li>\n
```

\n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": " The maximum items to return in a request. "
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": " An array that contains instance objects. "
            }
          },

```
            "NextToken": {

        "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
                }
              }
            }
          },
          "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
            "type": "operation",
            "input": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
            },
            "output": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
            },
            "errors": [
              {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
              },
               {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
              },
              {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
              }
            ],
            "traits": {
              "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
              "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
              },
              "smithy.api#idempotent": {},
              "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",

   "items": "Subscriptions"
              }
            }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
      "type": "structure",
      "members": {
        "Filters": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n        <p>The valid names for this filter are:</p>\n        <ul>\n
<li>\n            <p>\n              <code>Subscription</code>\n            </p>\n          </li>\n        </ul>\n
<p>The
 valid Operators for this filter are:</p>\n        <ul>\n          <li>\n            <p>\n
<code>contains</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>equals</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
            "smithy.api#length": {
              "min": 1,
              "max": 16384
            }
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
      "type": "structure",
      "members": {
        "Subscriptions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
          "traits": {
```

```
                "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
               "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
```

```
            "items": "RegisteredSubscriptionProviders"
          }
        }

    },
     "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSources": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
            "traits": {
              "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }

  },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
     },
     "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
          "RegisteredSubscriptionProviders": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
            }
          },
```

```
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {

       "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#readonly": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "resourceArn": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
             "traits": {
               "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
               "smithy.api#httpLabel": {},
               "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "EQUAL",
              "value": "Equal",
              "documentation": "Equal operator"
            },
            {
              "name": "NOT_EQUAL",
              "value": "NotEqual",
              "documentation": "Not equal operator"
            },
            {
              "name": "CONTAINS",
              "value": "Contains",
              "documentation": "Contains operator"
            }
          ],
          "smithy.api#length": {
```

```
            "min": 1,
            "max": 20
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled OrganizationIntegration"
            },
            {
              "name": "Disabled",
              "value": "Disabled",
              "documentation": "Disabled OrganizationIntegration"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
```

```
            "traits": {
                "smithy.api#documentation":
 "<p>The Linux subscription provider that you registered.</p>"
            }
          },
          "SubscriptionProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
 {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
             "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
```

```
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
```

```
            "smithy.api#error": "client"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

    }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "InProgress",
                "value": "InProgress",
                "documentation": "InProgress status"
              },
              {
                "name": "Completed",
                "value": "Completed",
                "documentation": "Completed status"
              },
              {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
              },
              {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
              }
            ]
          }
        },

       "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
          "type": "list",
          "member": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#length": {
                "min": 1,
                "max": 100
              }
```

```
            }
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            },
            "smithy.api#uniqueItems": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
{
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [

 {
                "name": "RedHat",
                "value": "RedHat",
                "documentation": "RedHat subscription provider namespace"
              }
            ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "ACTIVE",
              "value": "ACTIVE",
              "documentation": "ACTIVE status"
            },
            {
              "name": "INVALID",
              "value": "INVALID",
```

```
    "documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
```

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
{
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
```

```
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
```

```
            "resourceArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                  "smithy.api#httpLabel": {},
                  "smithy.api#required": {}
               }
            },
            "tagKeys": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
               "traits": {

              "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                  "smithy.api#httpQuery": "tagKeys",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
         "type": "structure",
         "members": {},
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

       },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                    "smithy.api#required": {}
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowUpdate": {
                "target": "smithy.api#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
        },
        "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
             "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
                "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
                "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
            }

    },
        "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated data for Linux\n      subscriptions.</p>"
            }
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
        "smithy.api#error": "client"
      }
    }
```

```
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType
```

```
 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
```

```
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
```

```
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "AssociateLicense",
 }
```

```
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string
```

```
// License entitlements.
//
// This member is required.
Entitlements []types.EntitlementData

// Key fingerprint identifying the license.
//
// This member is required.
KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string
```

```
 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
```

RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader

ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
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{
"smithy": "2.0",
"shapes": {

```
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
      "type": "structure",
      "members": {
        "DomainName": {
          "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
            }
          },
          "DomainIpv4List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 2
              }
            }
          },
          "DomainCredentialsProvider": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
            }
          },
          "DomainNetworkSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "SELF_MANAGED",
              "value": "SELF_MANAGED",
              "documentation": "SELF_MANAGED type of Active Directory"
            },
            {
              "name": "AWS_MANAGED",
```

```
                "value": "AWS_MANAGED",
                "documentation": "AWS_MANAGED type of Active Directory"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Arn": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n          <note>\n            <p>Your estimated bill for charges on the number of users and related
```

costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http":
{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {

```
                "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
              }
            }
          },
          "traits": {

        "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
          "type": "integer"
        },
        "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
             }
          },
          "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
          },
```

```
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },

        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/license-server/CreateLicenseServerEndpoint"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
              "smithy.api#required": {}
            }
          },
```

```
            "LicenseServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                 "traits": {
                    "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider specified in the request.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code> resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
```

```
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user \n\t\t\tadministration.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
          "smithy.api#http": {
```

```
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
                }
            }
        },
         "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
```

```
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
             "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}

    }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
```

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        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/DisassociateUser"
          },
          "smithy.api#idempotent": {}

      }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
```

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user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
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```
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
              "smithy.api#length": {
                "min": 1
              },

    "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Attribute": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
            }
          },
          "Operation": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
            }
          },
          "Value": {
            "target": "smithy.api#String",
            "traits":
 {
              "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
          }
        },
        "traits": {
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            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
          "type": "union",
          "members": {
            "ActiveDirectoryIdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
          "type": "structure",
          "members": {
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "Settings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
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            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of the
identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
            }
        },
        "FailureMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an identity provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
      "type": "list",
      "member": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
      "type": "structure",
      "members": {
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },
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            "Status": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                "smithy.api#required": {}
              }
            },
            "Products": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
               "traits": {
                "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                "smithy.api#required": {}
              }
            },
            "LastStatusCheckDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The date of the last status check.</p>"
              }
            },
            "StatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                "smithy.api#required": {}
              }
            },
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```
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                  "smithy.api#required": {}
               }
            },

      "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "Status": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                  "smithy.api#required": {}
               }
            },
            "InstanceUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
                }
            },
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
               }
            },
            "AssociationDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
```

```
            }
          },
          "DisassociationDate": {
            "target": "smithy.api#String",
             "traits": {
               "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
           "smithy.api#error": "server",
          "smithy.api#httpError": 500
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
```

```
"operations": [
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
     },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
     },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
```

```
        },
        {

  "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

       "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to
utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
```

```
{
                "builtIn": "AWS::Region",
                "required": false,
                "documentation": "The AWS region used to dispatch the request.",
                "type": "String"
            },
            "UseDualStack": {
                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                "type": "Boolean"
            },
            "UseFIPS": {
                "builtIn": "AWS::UseFIPS",
                "required": true,
                "default": false,
                "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                "type": "Boolean"
            },
            "Endpoint": {
                "builtIn": "SDK::Endpoint",
                "required": false,
                "documentation": "Override the endpoint used to send this request",
                "type": "String"
            }
        },
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "isSet",
                        "argv": [
                            {
                                "ref": "Endpoint"
                            }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
```

```
                        {
                            "ref": "UseFIPS"
                        },
                        true
                    ]
                }
            ],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [
                {

                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [],
            "endpoint": {
                "url": {
                    "ref": "Endpoint"
                },

"properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Region"
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```
                }
              ]
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "aws.partition",

                  "argv": [
                    {
                      "ref": "Region"
                    }
                  ],
                  "assign": "PartitionResult"
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseFIPS"
                        },

true
                      ]
                    },
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseDualStack"
                        },
                        true
                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [
                        {

"fn": "booleanEquals",
                          "argv": [
```

```
                    true,
                    {
                      "fn": "getAttr",
                      "argv": [
                        {
                          "ref": "PartitionResult"
                        },
                        "supportsFIPS"
                      ]
                    }
                  ]
                },

              {
                  "fn": "booleanEquals",
                  "argv": [
                    true,
                    {
                      "fn": "getAttr",
                      "argv": [
                        {
                          "ref": "PartitionResult"
                        },
                        "supportsDualStack"
                      ]
                    }

            ]
                }
              ],
              "rules": [
                {
                  "conditions": [],
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }

  ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
```

```
both",
                "type": "error"
              }
            ],
            "type": "tree"
          },
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [

 {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "fn": "getAttr",
                        "argv": [

        {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      },
                      true
                    ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {

          "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                      "properties": {},
                      "headers": {}
                    },
```

```
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "FIPS is enabled but this partition does not support FIPS",
                        "type": "error"

}
                ],
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {

    "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]

     }
                            ]
                        }
                    ],
                    "rules": [
```

```
                                    {
                                        "conditions": [],
                                        "endpoint": {
                                            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }

                                ],
                                    "type": "tree"
                                },
                                {
                                    "conditions": [],
                                    "error": "DualStack is enabled but this partition does not support DualStack",
                                    "type": "error"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                        "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ]
},
"smithy.rules#endpointTests": {
    "testCases": [
```

```
                {
                  "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                  "expect":
{
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",

        "UseFIPS": true,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint":
{
                      "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
                    }
```

```
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS":
true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
```

```
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
        }
      },
```

```
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
         "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false

  }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
```

```
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
            }

      },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
```

```
                "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                  "error": "DualStack is enabled but this partition does not support DualStack"
                },
                "params": {
                  "Region": "us-isob-east-1",

  "UseFIPS": false,
                  "UseDualStack": true
                }
              },
              {
                "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
                  }
                },
                "params": {
                  "Region": "us-isob-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
                "expect": {

                 "endpoint": {
                    "url": "https://example.com"
                  }
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://example.com"
                  }
                },
                "params": {
```

```
                    "UseFIPS": false,
                    "UseDualStack":
false,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                  "expect": {
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                  "expect": {
                    "error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "Missing region",
                  "expect": {
                    "error": "Invalid Configuration: Missing Region"
                  }
                }
              ],
              "version": "1.0"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
          "type": "structure",
          "members": {
            "ProvisioningStatus": {
              "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
```

```
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
                }
            },
            "HealthStatus": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
                }
            },
            "Ipv4Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information
 about a Remote Desktop Services (RDS) license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>"
                }
            },
            "ServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

  "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
                }
            },
```

```
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
                }
            },
            "LicenseServerEndpointId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits":
 {
                    "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
                }
            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
                }
            },

           "CreationTime": {
                "target": "smithy.api#Timestamp",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

  "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "PROVISIONING",
              "value": "PROVISIONING",
              "documentation": ""
            },
            {
              "name": "PROVISIONING_FAILED",
              "value": "PROVISIONING_FAILED",
              "documentation": ""
            },
            {
              "name": "PROVISIONED",
              "value": "PROVISIONED",
              "documentation": ""
            },
            {
              "name": "DELETING",
              "value": "DELETING",
              "documentation": ""
            },
            {
              "name": "DELETION_FAILED",
              "value": "DELETION_FAILED",
              "documentation": ""

           },
            {
              "name": "DELETED",
              "value": "DELETED",
              "documentation": ""
            }
          ]
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "HEALTHY",
              "value": "HEALTHY",
              "documentation": ""
            },
            {
              "name": "UNHEALTHY",
              "value": "UNHEALTHY",
              "documentation": ""
            },
            {
              "name": "NOT_APPLICABLE",
              "value": "NOT_APPLICABLE",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of license server.</p>",
              "smithy.api#required": {}
            }
          },
          "ServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
              "smithy.api#required": {}
            }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {

            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
             },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
```

```
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "IdentityProviderSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use
 the following filters to streamline results:</p>\n        <ul>\n          <li>\n            <p>Product</p>\n          </li>\n
        <li>\n            <p>DirectoryId</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

          "traits": {
              "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources
that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
              "smithy.api#required": {}
            }
          },
```

```
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
      "type": "operation",
       "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },

    {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
```

```
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members":
{
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n
        <li>\n            <p>InstanceId</p>\n          </li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
```

```
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next
 token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
```

```
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/license-server/ListLicenseServerEndpoints"
            },

          "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "LicenseServerEndpoints"
            }
          }
       },
       "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
          "type": "structure",
          "members": {
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                  "smithy.api#range": {
                     "min": 1,
                     "max": 100
                  }
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n               <p>IdentityProviderArn</p>\n            </li>\n         </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
               }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
      "type": "structure",
      "members": {
        "LicenseServerEndpoints": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
           "traits": {
             "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
      "type":
 "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
{
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
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request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>Username</p>\n
</li>\n          <li>\n          <p>Domain</p>\n          </li>\n          </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating.
 This is the nextToken \n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service
 hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
        "type": "operation",
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        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#readonly": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
 you want to retrieve.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}

           }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
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```
        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
         }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListUserAssociations"
```

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            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "InstanceUserSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
          "type": "structure",
          "members": {
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which
 provides user-based subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {

        "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n        <ul>\n
    <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n          </li>\n
<li>\n            <p>Domain</p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
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            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummaries": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username":
{
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for this product user.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
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        },
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of a product for this user.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
          }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
          }
        },
        "Domain": {
          "target": "smithy.api#String",
          "traits": {

        "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
          }
        },
        "SubscriptionStartDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The start date of a subscription.</p>"
          }
        },
        "SubscriptionEndDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The end date of a subscription.</p>"
          }
        }
      },
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        "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
            "RdsSalCredentialsProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS) license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {

    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
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            "traits":
{
                "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation":
"<p>Metadata that describes the results of an identity provider operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
```

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            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",

        "smithy.api#error": "client",
            "smithy.api#httpError": 404
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
          "type": "structure",
          "members": {
            "SecretId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                "smithy.api#length": {
                  "min": 1
                }
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
          "type": "string",
          "traits": {
            "smithy.api#length": {

           "min": 5,
              "max": 200
            },
            "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
          "type": "structure",
          "members": {
            "Endpoint": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
```

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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
             "traits": {
               "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {

  "target": "smithy.api#String"
            }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
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                "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                "smithy.api#length": {
                  "min": 1
                },
                "smithy.api#required": {}
              }
            },
            "SecurityGroupId": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

             "traits": {
                "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
```

```
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n        <note>\n        <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/StartProductSubscription"
            }

        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {

  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n        <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n</p>",
```

```
                "smithy.api#required": {}
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user for whom to start the product \n\t\t\tsubscription.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
              }

  }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

    },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
```

```
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

    },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/StopProductSubscription"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
              }
            },
            "IdentityProvider": {
              "target":
 "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
              }
```

```
            },
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "ProductUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"

               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
         "type": "structure",
         "members": {
            "ProductUserSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                  "smithy.api#required": {}
               }

   }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StringList": {
         "type": "list",
```

```
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {

"min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
```

```
        ],
        "traits": {
          "smithy.api#documentation":
"<p>Adds tags to a resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation":
"<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
```

```
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {

             "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
            },
```

```
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

        }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {

      "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
                }
            },

            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to update.</p>"
                }
            },
            "UpdateSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
```

```
                "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n                <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
        <li>\n                <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n                <p>Security
 group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n        </ul>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
              "traits": {
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
          "type": "structure",
          "members": {
            "AddSubnets": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                  "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
                  "smithy.api#required": {}
                }
              },
              "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                  "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                  "smithy.api#required": {}
                }
              },
              "SecurityGroupId": {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that
 allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for
activation servers.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
ListReceivedLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
```

spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
"context"
"fmt"
awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
"github.com/aws/smithy-go/middleware"
smithyhttp "github.com/aws/smithy-go/transport/http"

```
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
```

```
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpResponseCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
      },
      {
        "id": "Service",
        "namespace": "*"
      }
    ]
  },
  "shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
      "type": "service",
      "version": "2018-08-01",
      "operations": [
        {
          "target": "com.amazonaws.licensemanager#AcceptGrant"
```

```
        },

{
            "target": "com.amazonaws.licensemanager#CheckInLicense"
        },
        {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
        },
        {
            "target": "com.amazonaws.licensemanager#CheckoutLicense"
        },
        {
            "target": "com.amazonaws.licensemanager#CreateGrant"
        },
        {
            "target": "com.amazonaws.licensemanager#CreateGrantVersion"
        },
        {
            "target": "com.amazonaws.licensemanager#CreateLicense"
        },
        {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
        },
        {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
        },
        {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
         },
        {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
        },
        {
            "target": "com.amazonaws.licensemanager#CreateToken"
        },
        {
            "target": "com.amazonaws.licensemanager#DeleteGrant"
        },
        {
            "target": "com.amazonaws.licensemanager#DeleteLicense"
        },
        {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
        },
        {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
        },
        {
```

```
        "target": "com.amazonaws.licensemanager#DeleteToken"
      },
      {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

    },
      {
        "target": "com.amazonaws.licensemanager#GetAccessToken"
      },
      {
        "target": "com.amazonaws.licensemanager#GetGrant"
      },
      {
        "target": "com.amazonaws.licensemanager#GetLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
      },
      {
        "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
      },
      {
        "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
      },
      {
        "target": "com.amazonaws.licensemanager#GetLicenseUsage"
      },
      {
        "target": "com.amazonaws.licensemanager#GetServiceSettings"
      },
      {
        "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
       },
      {
        "target": "com.amazonaws.licensemanager#ListDistributedGrants"
      },
      {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
      },
      {
        "target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
      },
      {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
      },
      {
        "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
      },
```

```
{
   "target": "com.amazonaws.licensemanager#ListLicenses"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

  "target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
   "target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
   "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
   "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
   "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
   "target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
   "target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
   "target": "com.amazonaws.licensemanager#ListTokens"
},
{
   "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
 },
{
   "target": "com.amazonaws.licensemanager#RejectGrant"
},
{
   "target": "com.amazonaws.licensemanager#TagResource"
},
{
   "target": "com.amazonaws.licensemanager#UntagResource"
},
{
   "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
   "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
```

```
        },
        {
          "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
        },
        {
          "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager",
          "arnNamespace": "license-manager",
          "cloudFormationName": "LicenseManager",
          "cloudTrailEventSource": "licensemanager.amazonaws.com",
          "endpointPrefix": "license-manager"
        },
        "aws.auth#sigv4": {
          "name": "license-manager"
        },
        "aws.protocols#awsJson1_1": {},
        "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software vendors across multiple \n        Amazon Web Services accounts and on-premises servers.</p>",
        "smithy.api#title": "AWS License Manager",
        "smithy.api#xmlNamespace": {
          "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
        },
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send
```

this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",


```
            "type": "Boolean"
        },
        "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
        }
    },
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]

                }
                ],
                "type": "tree",
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },
                                    true
                                ]
                            }
                        ],
                        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                        "type": "error"
                    },
                    {

 "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
```

```
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
        "type": "error"
      },
      {
        "conditions": [],
        "endpoint": {
          "url": {
            "ref": "Endpoint"
          },
          "properties": {},
          "headers": {}
        },
        "type": "endpoint"
      }
    ]
  },
  {
    "conditions": [
      {
        "fn": "isSet",
        "argv": [
          {
            "ref": "Region"
          }
        ]
      }
    ],
    "type": "tree",
    "rules": [
      {
        "conditions": [
          {
            "fn": "aws.partition",
            "argv": [
              {
                "ref": "Region"
              }
            ],
            "assign": "PartitionResult"
          }
        ],
        "type": "tree",
```

```
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref":
"UseFIPS"
                                    },
                                    true
                                ]
                            },
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]
                            }
                        ],
                        "type": "tree",
                        "rules": [
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            true,
                                            {
                                                "fn": "getAttr",
                                                "argv": [
                                                    {
                                                        "ref": "PartitionResult"
                                                    },
                                                    "supportsFIPS"
                                                ]

                                            }
                                        ]
                                    },
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            true,
                                            {
```

```
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },

    "supportsDualStack"
                                        ]
                                    }
                                ]
                            }
                        ],
                        "type": "tree",
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}

                            },
                                "type": "endpoint"
                            }
                        ]
                    },
                    {
                        "conditions": [],
                        "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                        "type": "error"
                    }
                ]
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",

                  "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true
                        ]
                    }
                ],
```

```
                "type": "tree",
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          true,

                {
                              "fn": "getAttr",
                              "argv": [
                                {
                                  "ref": "PartitionResult"
                                },
                                "supportsFIPS"
                              ]
                            }
                          ]
                        }
                      ],
                      "type": "tree",
                      "rules": [

                {
                            "conditions": [],
                            "endpoint": {
                              "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
                              "properties": {},
                              "headers": {}
                            },
                            "type": "endpoint"
                          }
                        ]
                      },
                      {
                        "conditions": [],
                        "error": "FIPS is enabled but this
partition does not support FIPS",
                        "type": "error"
                      }
                    ]
                  },
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
```

```
                {
                  "ref": "UseDualStack"
                },
                true
              ]
            }
          ],
          "type": "tree",
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    true,
                    {
                      "fn": "getAttr",
                      "argv": [
                        {
                          "ref": "PartitionResult"
                        },

"supportsDualStack"

                        ]
                      }
                    ]
                  }
                ],
                "type": "tree",
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                      "properties": {},
                      "headers": {}

          },
                    "type": "endpoint"
                  }
                ]
            },
            {
              "conditions": [],
              "error": "DualStack is enabled but this partition does not support DualStack",
              "type": "error"
            }
```

```
                        ]
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                             "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ]
            }
        ]
    },
    {
        "conditions": [],
        "error": "Invalid Configuration: Missing Region",
        "type": "error"
    }
  ]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager.af-south-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "af-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "ap-east-1",
        "UseFIPS": false,
```

```
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-northeast-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-northeast-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-northeast-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-northeast-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-northeast-3.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-northeast-3",
            "UseFIPS": false,
            "UseDualStack": false
          }

    },
        {
          "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-south-1.amazonaws.com"
```

```
            }
          },
          "params": {
            "Region": "ap-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-1.amazonaws.com"

}
          },
          "params": {
            "Region": "ap-southeast-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-southeast-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-3.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-southeast-3",
            "UseFIPS": false,
            "UseDualStack": false
          }
```

```
    },
    {
      "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ca-central-1.amazonaws.com"
        }
      },

     "params": {
        "Region": "ca-central-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-central-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-central-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-north-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-south-1.amazonaws.com"
        }
```

```
      },
      "params": {
        "Region":
"eu-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-west-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-west-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
      "expect": {

      "endpoint": {
          "url": "https://license-manager.eu-west-2.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-west-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-west-3.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-west-3",
        "UseFIPS": false,

   "UseDualStack": false
      }
```

```
        },
        {
          "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.me-south-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "me-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.sa-east-1.amazonaws.com"
             }
          },
          "params": {
            "Region": "sa-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }

    },
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-east-1.amazonaws.com"
            }
          },
```

```
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-east-2.amazonaws.com"
        }

     },
      "params": {
        "Region": "us-east-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-east-2.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-2",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-west-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-west-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
```

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      "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-west-1.amazonaws.com"
        }
      },
      "params": {

    "Region": "us-west-1",
        "UseFIPS": true,
        "UseDualStack": false
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    },
    {
      "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-west-2.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-west-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

"expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-west-2.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-west-2",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-east-1.api.aws"
        }
      },
      "params": {
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                "Region": "us-east-1",
                "UseFIPS": true,

                "UseDualStack": true
            }
        },
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            "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
                }
            },
            "params": {
                "Region": "cn-northwest-1",
                "UseFIPS": false,
                "UseDualStack": false

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        },
        {
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      "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
         }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },

  {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
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            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-gov-west-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-west-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-west-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
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                "url": "https://license-manager-fips.us-gov-east-1.api.aws"
              }
            },

    "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.us-gov-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
                }
              },
              "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
              },
              "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                 "UseDualStack": true
              }
            },
```

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    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled
but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },

   {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
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      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
"params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
"expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
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```
                }
              },
              "params": {
                "UseFIPS": false,

      "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips enabled and dualstack disabled",
              "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips disabled and dualstack enabled",
              "expect": {
                "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "Missing region",
              "expect": {
                "error": "Invalid Configuration: Missing Region"
              }
            }
          ],
          "version": "1.0"
        }
      }
    },
    "com.amazonaws.licensemanager#AcceptGrant": {
      "type": "operation",
      "input": {
```

```
            "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

    },
        "output": {
            "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"

      }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
      },
      "com.amazonaws.licensemanager#AcceptGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
```

```
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant
ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#AccessDeniedException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {

  "code": "ServiceAccessDenied",
          "httpResponseCode": 401
        },
        "smithy.api#documentation": "<p>Access to resource denied.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 401
      }
    },
    "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
      "type": "enum",
```

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      "members": {
        "DISTRIBUTED_GRANTS_ONLY": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
          }
        },
        "ALL_GRANTS_PERMITTED_BY_ISSUER": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#AllowedOperation": {

   "type": "enum",
      "members": {
        "CREATE_GRANT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "CreateGrant"
          }
        },
        "CHECKOUT_LICENSE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "CheckoutLicense"
          }
        },
        "CHECKOUT_BORROW_LICENSE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "CheckoutBorrowLicense"
          }
        },
        "CHECK_IN_LICENSE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "CheckInLicense"
          }
        },
        "EXTEND_CONSUMPTION_LICENSE":
{
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "ExtendConsumptionLicense"
```

```
            }
          },
          "LIST_PURCHASED_LICENSES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ListPurchasedLicenses"
            }
          },
          "CREATE_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CreateToken"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max":
7
          }
        }
      },
      "com.amazonaws.licensemanager#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 2048
          },
          "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
      },
      "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Arn"
        }
      },
      "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
```

```
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError":
{
            "code": "AuthorizationFailure",
            "httpResponseCode": 403
          },
          "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n        policy associated with this account.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 403
        }
      },
      "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
          "LastRunTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
      },

    "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
          "smithy.api#default": false
        }
      },
      "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
          "AllowEarlyCheckIn": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
              "smithy.api#required": {}
            }
          },
```

```
            "MaxTimeToLiveInMinutes": {
               "target": "com.amazonaws.licensemanager#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                  "smithy.api#required": {}
               }
            }

},
         "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
         }
      },
      "com.amazonaws.licensemanager#BoxBoolean": {
         "type": "boolean"
      },
      "com.amazonaws.licensemanager#BoxInteger": {
         "type": "integer"
      },
      "com.amazonaws.licensemanager#BoxLong": {
         "type": "long"
      },
      "com.amazonaws.licensemanager#CheckInLicense": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"

       },
            {
               "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
```

```
{
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
            "smithy.api#required": {}
          }
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementDataList",
          "traits": {
            "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
            "smithy.api#required": {}
          }
        },
        "DigitalSignatureMethod": {
          "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
          "traits": {
            "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
            "smithy.api#required": {}
          }
        },
        "NodeId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Node ID.</p>"
          }
        },
        "CheckoutMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
            "smithy.api#documentation": "<p>Information about constraints.</p>"
          }
        },
        "ClientToken": {
          "target": "com.amazonaws.licensemanager#ClientToken",
          "traits": {
            "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License consumption token.</p>"
            }
          },
          "EntitlementsAllowed":
{
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
          },
          "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
              "smithy.api#documentation": "<p>Signed token.</p>"
            }
          },
          "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
            }
          },
          "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
            }
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        },
        "CheckoutMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
            "smithy.api#documentation": "<p>Information about constraints.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CheckoutLicense": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target":
"com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n        <p>If the account that created the license is the same that is performing the check out, you must\n        specify the account as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",

    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
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idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            }
        },
        "traits": {

          "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseResponse": {
        "type": "structure",
        "members": {
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>"
                }
            },
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
            "EntitlementsAllowed": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
                }
            },
            "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
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            },
            "NodeId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
              }
            },
            "IssuedAt": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
              }
            },
            "Expiration": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
              }
            },
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#CheckoutType": {
          "type": "enum",
          "members": {
            "PROVISIONAL": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "PROVISIONAL"
              }
            },
            "PERPETUAL": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "PERPETUAL"
              }
             }
          }
        },
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    "com.amazonaws.licensemanager#ClientRequestToken": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 36
        }
      }
    },
    "com.amazonaws.licensemanager#ClientToken": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 2048
        },
        "smithy.api#pattern": "^\\S+$"
      }
    },
    "com.amazonaws.licensemanager#ConflictException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "ConflictException",
          "httpResponseCode":
409
        },
        "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 409
      }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
      "type": "structure",
      "members": {
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
          }
        },
        "ConsumedLicenses": {
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            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
            }
          }
        },

"traits": {
          "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
      },
      "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
      },
      "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
          "RenewType": {
            "target": "com.amazonaws.licensemanager#RenewType",
            "traits": {
              "smithy.api#documentation": "<p>Renewal frequency.</p>"
            }
          },
          "ProvisionalConfiguration": {
            "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
             }
          },
          "BorrowConfiguration": {
            "target": "com.amazonaws.licensemanager#BorrowConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
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        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
 license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
 organizational unit (OU). For more
  information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
 licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
 idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
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            "traits": {
                "smithy.api#documentation": "<p>Grant name.</p>",
                "smithy.api#required": {}

    }
        },
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "Principals": {
            "target": "com.amazonaws.licensemanager#PrincipalArnList",
            "traits": {
                "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN):</p>\n <ul>\n <li>\n <p>An Amazon Web Services account, which includes only the account specified.</p>\n </li>\n </ul>\n <ul>\n <li>\n <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n </li>\n </ul>\n <ul>\n
        <li>\n <p>An organization, which will include all accounts across your organization.</p>\n </li>\n </ul>",
                "smithy.api#required": {}
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                "smithy.api#required": {}
            }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },

    "com.amazonaws.licensemanager#CreateGrantResponse": {
      "type": "structure",
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      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CreateGrantVersion":
{
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
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            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
         }
      },
      "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
         "type": "structure",
         "members": {
            "ClientToken": {
               "target": "com.amazonaws.licensemanager#ClientToken",
               "traits": {
                  "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",

   "smithy.api#required": {}
               }
            },
            "GrantArn": {
               "target": "com.amazonaws.licensemanager#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                  "smithy.api#required": {}
               }
            },
            "GrantName": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Grant name.</p>"
               }
            },
            "AllowedOperations": {
               "target": "com.amazonaws.licensemanager#AllowedOperationList",
               "traits": {
                  "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
               }
            },
            "Status": {
               "target": "com.amazonaws.licensemanager#GrantStatus",
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            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
```

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        },
        "traits":
{
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
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        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n            <p>A license configuration is an abstraction of a customer license agreement that can be\n            consumed and enforced by License Manager. Components include specifications for the license\n            type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n            Dedicated Instance, Dedicated Host, or
 all of these), license affinity  to host (how long a \n            license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
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            "traits": {
              "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
          },
          "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
            }
          },
          "LicenseRules": {
            "target":
 "com.amazonaws.licensemanager#StringList",
            "traits": {
              "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n          <li>\n            <p>\n              <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
          <code>licenseAffinityToHost</code> |\n            <code>maximumCores</code> |
<code>minimumCores</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n            <code>maximumCores</code> |
<code>minimumCores</code> |\n            <code>maximumSockets</code> | <code>minimumSockets</code> |\n
        <code>maximumVcpus</code> | <code>minimumVcpus</code>\n            </p>\n          </li>\n
<li>\n
  <p>\n            <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n            <code>maximumSockets</code> |
<code>minimumSockets</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n            <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n            </p>\n          </li>\n        </ul>\n        <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"
            }
          },

  "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
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            }
          },
          "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>Product information.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
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                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n         For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext":
{
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
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the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

          "traits": {
                    "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
```

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            {
               "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
         }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
         "type": "structure",
         "members": {
            "ReportGeneratorName":
{
               "target": "com.amazonaws.licensemanager#ReportGeneratorName",
               "traits": {
                  "smithy.api#documentation": "<p>Name of the report generator.</p>",
                  "smithy.api#required": {}
               }
            },
            "Type": {
               "target": "com.amazonaws.licensemanager#ReportTypeList",
               "traits": {
                  "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be generated:</p>\n <ul>\n <li>\n <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n </li>\n <li>\n <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n </li>\n </ul>",
                  "smithy.api#required": {}

      }
            },
            "ReportContext": {
               "target": "com.amazonaws.licensemanager#ReportContext",
               "traits": {
                  "smithy.api#documentation": "<p>Defines the type of license configuration the report generator tracks.</p>",
                  "smithy.api#required": {}
               }
            },
            "ReportFrequency": {
               "target": "com.amazonaws.licensemanager#ReportFrequency",
               "traits": {
```

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                "smithy.api#documentation": "<p>Frequency by which reports are generated.  Reports can be
generated daily, monthly, or weekly.</p>",
                "smithy.api#required": {}
              }
            },
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientRequestToken",
              "traits": {
                "smithy.api#documentation": "<p>Unique,
 case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            },
            "Description": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanager#TagList",
              "traits": {
                "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
          "type": "structure",
          "members": {
            "LicenseManagerReportGeneratorArn":
 {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
generator.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#CreateLicenseRequest": {
          "type": "structure",
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        "members": {
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits": {
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region for the license.</p>",
                    "smithy.api#required": {}

    }
            },
            "Validity": {
                "target": "com.amazonaws.licensemanager#DatetimeRange",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
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            "traits": {
              "smithy.api#documentation": "<p>License entitlements.</p>",
              "smithy.api#required": {}
            }
          },
          "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License beneficiary.</p>",
              "smithy.api#required": {}
            }
          },
          "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license.</p>"
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseResponse": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
```

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        },
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseStatus",
          "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
          }
        },
        "Version": {
           "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersion": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#ConflictException"
         },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
```

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            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits":
{
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region of the license.</p>",
                    "smithy.api#required": {}
                }
            },
```

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            "Validity": {
              "target": "com.amazonaws.licensemanager#DatetimeRange",
              "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-UTC format.</p>",
                "smithy.api#required": {}
              }
            },
            "LicenseMetadata": {
              "target": "com.amazonaws.licensemanager#MetadataList",
              "traits": {
                "smithy.api#documentation": "<p>Information about the license.</p>"
              }
            },
            "Entitlements": {
              "target": "com.amazonaws.licensemanager#EntitlementList",
              "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
              }
            },
            "ConsumptionConfiguration": {
              "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
              "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage.</p>",
                "smithy.api#required": {}
              }
            },

  "Status": {
              "target": "com.amazonaws.licensemanager#LicenseStatus",
              "traits": {
                "smithy.api#documentation": "<p>License status.</p>",
                "smithy.api#required": {}
              }
            },
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientToken",
              "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            },
            "SourceVersion": {
              "target": "com.amazonaws.licensemanager#String",
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            "traits": {
                "smithy.api#documentation": "<p>Current version of the license.</p>"
            }
          }
        },
        "traits": {

"smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>License ARN.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>New version of the license.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
{}
        }
      },
      "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

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            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },

        {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n          <p>A refresh token is a JWT token used to get an access token. With an access token,\n          you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n          call License Manager to manage the specified license.</p>"
          }
        },
        "com.amazonaws.licensemanager#CreateTokenRequest": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits":
{
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n          JWT token.</p>",
                "smithy.api#required": {}
              }
            },
            "RoleArns": {
              "target": "com.amazonaws.licensemanager#ArnList",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n          License Manager does not check whether the roles are in use.</p>"
              }
```

```
            },
            "ExpirationInDays": {
               "target": "com.amazonaws.licensemanager#Integer",
               "traits": {
                  "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The
default is 365 days.</p>"
               }
            },
            "TokenProperties": {
               "target": "com.amazonaws.licensemanager#MaxSize3StringList",
               "traits": {
                  "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n          to the amr claim of the JWT token.</p>"
               }
            },
            "ClientToken": {
               "target": "com.amazonaws.licensemanager#ClientToken",
               "traits": {
                  "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanager#CreateTokenResponse": {
         "type": "structure",
         "members": {
            "TokenId": {
               "target": "com.amazonaws.licensemanager#String",

               "traits": {
                  "smithy.api#documentation": "<p>Token ID.</p>"
               }
            },
            "TokenType": {
               "target": "com.amazonaws.licensemanager#TokenType",
               "traits": {
                  "smithy.api#documentation": "<p>Token type.</p>"
               }
            },
            "Token": {
               "target": "com.amazonaws.licensemanager#TokenString",
               "traits": {
                  "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
               }
```

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        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse": {
```

```
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

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},
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
         }
      },
      "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
         },

      "errors": [
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n         <p>You cannot
delete a license configuration that is in use.</p>"
         }
```

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    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
      "type": "structure",
      "members":
{
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>ID of the license configuration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
```

```
            {
               "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
             }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n          <p>This action deletes the report generator, which stops it from generating future reports.\n          The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
         }
      },
      "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
         "type": "structure",
         "members": {
            "LicenseManagerReportGeneratorArn": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {

  "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
         "type": "structure",
         "members": {},
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanager#DeleteLicenseRequest": {
         "type": "structure",
         "members": {
            "LicenseArn": {
               "target": "com.amazonaws.licensemanager#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                  "smithy.api#required": {}
```

```
            }
          },
          "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the license.</p>",
              "smithy.api#required":
{}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          },
          "DeletionDate": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteToken": {
        "type": "operation",
         "input": {
          "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
```

```
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },

    {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
      },
      "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
          "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token ID.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}

      }
      },
      "com.amazonaws.licensemanager#DigitalSignatureMethod": {
```

```
        "type": "enum",
        "members": {
          "JWT_PS384": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "JWT_PS384"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#Entitlement": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement name.</p>",
              "smithy.api#required": {}
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
            }
          },
          "MaxCount": {
            "target": "com.amazonaws.licensemanager#Long",
            "traits": {
              "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
            }
          },
          "Overage": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
            }
          },
          "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementUnit",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement unit.</p>",
              "smithy.api#required": {}
            }
          },
          "AllowCheckIn": {
            "target":
```

```
"com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementData": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement
data value.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "enum",
        "members": {
```

```
            "COUNT": {
               "target": "smithy.api#Unit",
               "traits": {

"smithy.api#enumValue": "Count"
               }
            },
            "NONE": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "None"
               }
            },
            "SECONDS": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "Seconds"
               }
            },
            "MICROSECONDS": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "Microseconds"
               }
            },
            "MILLISECONDS": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "Milliseconds"
               }
            },
            "BYTES": {
               "target": "smithy.api#Unit",
                "traits": {
                  "smithy.api#enumValue": "Bytes"
               }
            },
            "KILOBYTES": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "Kilobytes"
               }
            },
            "MEGABYTES": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "Megabytes"
               }
```

```
        },
        "GIGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes"
          }
        },
        "TERABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabytes"
          }
        },
        "BITS":
{
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits"
          }
        },
        "KILOBITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits"
          }
        },
        "MEGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabits"
          }
        },
        "GIGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits"
          }
        },
        "TERABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits"

    }
        },
        "PERCENT": {
          "target": "smithy.api#Unit",
          "traits": {
```

```
        "smithy.api#enumValue": "Percent"
      }
    },
    "BYTES_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Bytes/Second"
      }
    },
    "KILOBYTES_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Kilobytes/Second"
      }
    },
    "MEGABYTES_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Megabytes/Second"
      }
    },
    "GIGABYTES_PER_SECOND": {
      "target": "smithy.api#Unit",
       "traits": {
        "smithy.api#enumValue": "Gigabytes/Second"
      }
    },
    "TERABYTES_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Terabytes/Second"
      }
    },
    "BITS_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Bits/Second"
      }
    },
    "KILOBITS_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Kilobits/Second"
      }
    },
    "MEGABITS_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
```

```
                "smithy.api#enumValue":
"Megabits/Second"
              }
            },
            "GIGABITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
              }
            },
            "TERABITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Terabits/Second"
              }
            },
            "COUNT_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Count/Second"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#EntitlementList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#Entitlement"
          }
        },
        "com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
          "type": "structure",
          "members": {
            "Message": {
              "target": "com.amazonaws.licensemanager#Message"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
          }
        },
        "com.amazonaws.licensemanager#EntitlementUnit": {
          "type": "enum",
          "members": {
            "COUNT": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Count"
            }
          },
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "SECONDS":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Seconds"
            }
          },
          "MICROSECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Microseconds"
            }
          },
          "MILLISECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Milliseconds"
            }
          },
          "BYTES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Bytes"
            }
          },
          "KILOBYTES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Kilobytes"
             }
          },
          "MEGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Megabytes"
            }
          },
```

```
"GIGABYTES": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Gigabytes"
   }
},
"TERABYTES": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Terabytes"
   }
},
"BITS": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Bits"
   }
},
"KILOBITS": {
   "target": "smithy.api#Unit",
   "traits": {

    "smithy.api#enumValue": "Kilobits"
   }
},
"MEGABITS": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Megabits"
   }
},
"GIGABITS": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Gigabits"
   }
},
"TERABITS": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Terabits"
   }
},
"PERCENT": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Percent"
   }
```

```
        },
        "BYTES_PER_SECOND": {
          "target":
"smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bytes/Second"
          }
        },
        "KILOBYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobytes/Second"
          }
        },
        "MEGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabytes/Second"
          }
        },
        "GIGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes/Second"
          }
        },
        "TERABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {

"smithy.api#enumValue": "Terabytes/Second"
          }
        },
        "BITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits/Second"
          }
        },
        "KILOBITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits/Second"
          }
        },
        "MEGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
```

```
            "smithy.api#enumValue": "Megabits/Second"
          }
        },
        "GIGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits/Second"
          }
        },

   "TERABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits/Second"
          }
        },
        "COUNT_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Count/Second"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#EntitlementUsage": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Entitlement usage name.</p>",
            "smithy.api#required": {}
          }
        },
        "ConsumedValue": {
          "target": "com.amazonaws.licensemanager#String",

       "traits": {
            "smithy.api#documentation": "<p>Resource usage consumed.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxCount": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
          }
        },
```

```
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

```
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
          }
        },
        "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
          "type": "structure",
          "members": {
            "LicenseConsumptionToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>",
                "smithy.api#required": {}

     }
            },
            "DryRun": {
              "target": "com.amazonaws.licensemanager#Boolean",
              "traits": {
                "smithy.api#default": false,
                "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
          "type": "structure",
          "members": {
            "LicenseConsumptionToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
              }
            },

            "Expiration": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
              }
            }
          },
          "traits": {
```

```
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#FailedDependencyException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            },
            "ErrorCode": {
                "target": "com.amazonaws.licensemanager#String"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FailedDependency",
                "httpResponseCode": 424
            },
            "smithy.api#documentation":
 "<p>A dependency required to run the API is missing.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 424
        }
    },
    "com.amazonaws.licensemanager#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#FilterName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanager#FilterValues",
                "traits": {
                    "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only
specify one value for the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter
 name and value pair that is used to return more specific results from a\n          describe operation. Filters can be used
to match a set of resources by specific criteria,\n          such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanager#FilterLimitExceededException": {
```

```
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n         are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
            }
        },
        "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
{
        "type": "structure",
        "members": {
            "AccessToken": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Temporary access token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

      },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

```
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
      }
    },
    "com.amazonaws.licensemanager#GetGrantRequest": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetGrantResponse": {
      "type": "structure",
      "members": {
        "Grant": {
          "target": "com.amazonaws.licensemanager#Grant",
          "traits": {
            "smithy.api#documentation": "<p>Grant details.</p>"
          }
        }
      },
      "traits": {

    "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicense": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
      },
      "output": {
```

```
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"

    },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
      }
    },
    "com.amazonaws.licensemanager#GetLicenseConfiguration": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
{
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                 }
            },
            "Description": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",

           "traits": {
                "smithy.api#documentation": "<p>Number of available licenses.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License configuration status.</p>"
            }

    },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
            }
```

```
            },
            "ConsumedLicenseSummaryList": {
              "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
              }
            },
            "ManagedResourceSummaryList": {
              "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanager#TagList",
               "traits": {
                "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
              }
            },
            "ProductInformationList": {
              "target": "com.amazonaws.licensemanager#ProductInformationList",
              "traits": {
                "smithy.api#documentation": "<p>Product information.</p>"
              }
            },
            "AutomatedDiscoveryInformation": {
              "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
              "traits": {
                "smithy.api#documentation": "<p>Automated discovery information.</p>"
              }
            },
            "DisassociateWhenNotFound": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#GetLicenseConversionTask": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
          },
```

```
        "output": {
          "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {

 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information
on.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
```

```
            }
        },
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
            }
        },
        "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information
 about the license type converted from.</p>"
            }
        },
        "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
        },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
```

```
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

         },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
```

```
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
          }
        },
        "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
          "type": "structure",
          "members": {
            "LicenseManagerReportGeneratorArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                "smithy.api#required":
{}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
          "type": "structure",
          "members": {
            "ReportGenerator": {
              "target": "com.amazonaws.licensemanager#ReportGenerator",
              "traits": {
                "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#GetLicenseRequest": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {

 "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
              }
            },
            "Version": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
```

```
            "smithy.api#documentation": "<p>License version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
      "type": "structure",
      "members": {
        "License": {
          "target": "com.amazonaws.licensemanager#License",
          "traits": {
            "smithy.api#documentation": "<p>License details.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },

  "com.amazonaws.licensemanager#GetLicenseUsage": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
```

```
  "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
          }
        },
        "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
          "type": "structure",
          "members": {
            "LicenseUsage": {
              "target":
"com.amazonaws.licensemanager#LicenseUsage",
              "traits": {
                "smithy.api#documentation": "<p>License usage details.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#GetServiceSettings": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
          },
          "errors": [
            {
```

```
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n         and so on.</p>"

 }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n         cross-account discovery.</p>"
                }
            },
```

```
        "EnableCrossAccountsDiscovery": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
          }

      },
        "LicenseManagerResourceShareArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#Grant": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
          }
        },
        "GrantName": {

 "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant name.</p>",
            "smithy.api#required": {}
          }
        },
        "ParentArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Parent ARN.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>License ARN.</p>",
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```
            "smithy.api#required": {}
          }
        },
        "GranteePrincipalArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {

"smithy.api#documentation": "<p>The grantee principal ARN.</p>",
            "smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the grant.</p>",
            "smithy.api#required": {}
          }
        },
        "GrantStatus": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>",
            "smithy.api#required": {}
          }
        },
        "StatusReason": {
          "target": "com.amazonaws.licensemanager#StatusReasonMessage",
          "traits": {
            "smithy.api#documentation": "<p>Grant status reason.</p>"
           }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>",
            "smithy.api#required": {}
          }
        },
        "GrantedOperations": {
          "target": "com.amazonaws.licensemanager#AllowedOperationList",
          "traits": {
            "smithy.api#documentation": "<p>Granted operations.</p>",
            "smithy.api#required": {}
          }
        },
        "Options": {
          "target": "com.amazonaws.licensemanager#Options",
          "traits": {
```

```
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation":
"<p>Describes a grant.</p>"
          }
        },
        "com.amazonaws.licensemanager#GrantList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#Grant"
          }
        },
        "com.amazonaws.licensemanager#GrantStatus": {
          "type": "enum",
          "members": {
            "PENDING_WORKFLOW": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "PENDING_WORKFLOW"
              }
            },
            "PENDING_ACCEPT": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "PENDING_ACCEPT"
              }
            },
            "REJECTED": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "REJECTED"

              }
            },
            "ACTIVE": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "ACTIVE"
              }
            },
            "FAILED_WORKFLOW": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
              }
```

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        },
        "DELETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DELETED"
          }
        },
        "PENDING_DELETE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "PENDING_DELETE"
          }
        },
        "DISABLED": {
          "target": "smithy.api#Unit",
          "traits":
{
            "smithy.api#enumValue": "DISABLED"
          }
        },
        "WORKFLOW_COMPLETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "WORKFLOW_COMPLETED"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
          }
        },
        "LicenseName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License name.</p>"
          }

 },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product name.</p>"
```

```
        }
      },
      "ProductSKU": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Product SKU.</p>"
        }
      },
      "Issuer": {
        "target": "com.amazonaws.licensemanager#IssuerDetails",
        "traits": {
          "smithy.api#documentation": "<p>Granted license issuer.</p>"
        }
      },
      "HomeRegion": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

       }
      },
      "Status": {
        "target": "com.amazonaws.licensemanager#LicenseStatus",
        "traits": {
          "smithy.api#documentation": "<p>Granted license status.</p>"
        }
      },
      "Validity": {
        "target": "com.amazonaws.licensemanager#DatetimeRange",
        "traits": {
          "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
        }
      },
      "Beneficiary": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
        }
      },
      "Entitlements": {
        "target": "com.amazonaws.licensemanager#EntitlementList",
         "traits": {
          "smithy.api#documentation": "<p>License entitlements.</p>"
        }
      },
      "ConsumptionConfiguration": {
        "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>Granted license metadata.</p>"
            }
        },
        "CreateTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

  }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Version of the granted license.</p>"
            }
        },
        "ReceivedMetadata": {
            "target": "com.amazonaws.licensemanager#ReceivedMetadata",
            "traits": {
                "smithy.api#documentation": "<p>Granted license received metadata.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
      }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#GrantedLicense"
      }
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
```

```
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
         }
      },
      "com.amazonaws.licensemanager#Integer": {
         "type": "integer"
      },
      "com.amazonaws.licensemanager#InvalidParameterValueException": {
         "type": "structure",
         "members": {
            "Message": {
               "target": "com.amazonaws.licensemanager#Message"
            }
         },
         "traits": {
            "aws.protocols#awsQueryError": {
               "code": "InvalidParameterValueProvided",
               "httpResponseCode": 400
            },
            "smithy.api#documentation":
 "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
         }
      },
      "com.amazonaws.licensemanager#InvalidResourceStateException": {
         "type": "structure",
         "members": {
            "Message": {
               "target": "com.amazonaws.licensemanager#Message"
            }
         },
         "traits": {
            "aws.protocols#awsQueryError": {
               "code": "InvalidResourceState",
               "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its state. </p>\n         <p>For example, you cannot allocate a license to an instance in the process of shutting\n down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
         }
      },

     "com.amazonaws.licensemanager#InventoryFilter": {
         "type": "structure",
         "members": {
```

```
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the filter.</p>",
            "smithy.api#required": {}
          }
        },
        "Condition": {
          "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
          "traits": {
            "smithy.api#documentation": "<p>Condition of the filter.</p>",
            "smithy.api#required": {}
          }
        },
        "Value": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Value of the filter.</p>"
          }
        }

},
    "traits": {
      "smithy.api#documentation": "<p>An inventory filter.</p>"
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
      "EQUALS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EQUALS"
        }
      },
      "NOT_EQUALS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "NOT_EQUALS"
        }
      },
      "BEGINS_WITH": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "BEGINS_WITH"
        }
      },
      "CONTAINS": {
```

```
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CONTAINS"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage
 of sign and verify, \n         and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>"
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

```
                "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n          and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            },
            "KeyFingerprint": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
          }
        },
        "com.amazonaws.licensemanager#License": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
              }
            },
            "LicenseName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {

             "smithy.api#documentation": "<p>License name.</p>"
              }
            },
            "ProductName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
              }
            },
            "ProductSKU": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
              }
            },
            "Issuer": {
              "target": "com.amazonaws.licensemanager#IssuerDetails",
              "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>"
```

```
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

        "smithy.api#documentation": "<p>Home Region of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>"
            }
        },
        "Entitlements": {

   "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>License metadata.</p>"
            }
        },
        "CreateTime": {
```

```
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>License
creation time.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
          "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
            }
          },
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          },
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
          },
          "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
              "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
```

```
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
             "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license configuration.</p>"
            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

       }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
            }
        },
        "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
            }
        },
        "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
                "smithy.api#documentation": "<p>Product information.</p>"
            }
        },
        "AutomatedDiscoveryInformation": {

            "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
            "traits": {
                "smithy.api#documentation": "<p>Automated discovery information.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
    "type": "structure",
    "members": {
        "ResourceArn":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of server resource.</p>"
            }
        },
```

```
            "ResourceOwnerId": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource consuming licenses.</p>"
               }
            },
            "AssociationTime": {
               "target": "com.amazonaws.licensemanager#DateTime",
               "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
               }
            },
            "AmiAssociationScope": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
         }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
         }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
         "type": "enum",
         "members":
{
            "AVAILABLE": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "AVAILABLE"
               }
            },
            "DISABLED": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "DISABLED"
               }
            }
```

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
                }
            },

    "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license
configuration.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurations": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConfiguration"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionContext": {

    "type": "structure",
        "members": {
          "UsageOperation": {
            "target": "com.amazonaws.licensemanager#UsageOperation",
            "traits": {
              "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from.  For more information about which platforms correspond to which usage
operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n        </p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {

       "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
            }
          },
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n        conversion task.</p>"
            }
```

```
        },
        "SourceLicenseContext": {
          "target": "com.amazonaws.licensemanager#LicenseConversionContext",
          "traits": {
            "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
          }
        },
        "DestinationLicenseContext": {
          "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
          "traits": {
            "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
          "traits": {
            "smithy.api#documentation": "<p>The status of the conversion task.</p>"
          }
        },
        "StatusMessage": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
          }
        },
        "StartTime": {
          "target": "com.amazonaws.licensemanager#DateTime",
          "traits": {
            "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
          }
        },
        "LicenseConversionTime": {
          "target": "com.amazonaws.licensemanager#DateTime",
          "traits": {
            "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
          }
        },
        "EndTime": {
          "target": "com.amazonaws.licensemanager#DateTime",
          "traits": {
            "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
          }
        }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskId": {
        "type": "string",
        "traits": {

       "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
            "IN_PROGRESS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "IN_PROGRESS"
                }
            },
            "SUCCEEDED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "SUCCEEDED"
                }
            },
            "FAILED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
```

```
    "members": {
      "VCPU": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "vCPU"
        }
      },
      "INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Instance"
        }
      },
      "CORE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Core"
        }
      },
      "SOCKET": {
        "target": "smithy.api#Unit",
         "traits": {
          "smithy.api#enumValue": "Socket"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
      "PENDING_DELETE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PENDING_DELETE"
        }
      },
      "DELETED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "DELETED"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#License"
```

```
        }
      },
      "com.amazonaws.licensemanager#LicenseOperationFailure": {

        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Resource type.</p>"
            }
          },
          "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Error message.</p>"
            }
          },
          "FailureTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {

      "smithy.api#documentation": "<p>Failure time.</p>"
            }
          },
          "OperationName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the operation.</p>"
            }
          },
          "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
            }
          },
          "OperationRequestedBy": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
```

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            }
          },
          "MetadataList": {

            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Reserved.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseOperationFailureList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
        }
      },
      "com.amazonaws.licensemanager#LicenseSpecification": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

              "smithy.api#required": {}
            }
          },
          "AmiAssociationScope": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseSpecifications": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseSpecification"
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    }
},
"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {
            "target": "smithy.api#Unit",

        "traits": {
                "smithy.api#enumValue": "AVAILABLE"
            }
        },
        "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
        },
        "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
            }
        },
        "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

     "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
```

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            }
          }
        },
        "com.amazonaws.licensemanager#LicenseUsage": {
          "type": "structure",
          "members": {
            "EntitlementUsages": {
              "target": "com.amazonaws.licensemanager#EntitlementUsageList",
              "traits": {
                "smithy.api#documentation": "<p>License entitlement usages.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

          }
        },
        "com.amazonaws.licensemanager#LicenseUsageException": {
          "type": "structure",
          "members": {
            "Message": {
              "target": "com.amazonaws.licensemanager#Message"
            }
          },
          "traits": {
            "aws.protocols#awsQueryError": {
              "code": "LicenseUsageFailure",
              "httpResponseCode": 412
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
          }
        },
        "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
          },
          "output": {

       "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
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            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
          }
        },
        "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
          "type": "structure",
          "members": {
            "LicenseConfigurationArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results
 to return in a single call.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
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        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
          "LicenseConfigurationAssociations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
            "traits": {
              "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
            }
          },
          "NextToken": {

 "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListDistributedGrants": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
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            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
          "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {

          "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n
  <li>\n            <p>\n              <code>GranteePrincipalARN</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>LicenseIssuerName</code>\n
        </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
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      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
      "type": "structure",
      "members": {
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",

    "traits": {
            "smithy.api#documentation": "<p>Distributed grant details.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
      },
      "errors": [
        {

"target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
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            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
          "LicenseOperationFailureList": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
            "traits": {
              "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
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            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the license configurations
for your account.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
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configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
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      "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
       },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      },
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            "MaxResults": {
              "target": "com.amazonaws.licensemanager#BoxInteger",
              "traits": {

    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#Filters",
              "traits": {
                "smithy.api#documentation": "<p>\n         Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
          "type": "structure",
          "members": {
            "LicenseConversionTasks": {
              "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
              "traits": {
                "smithy.api#documentation": "<p>Information about the license configuration tasks for your
 account.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
          },
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        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target":
"com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n      <ul>\n        <li>\n          <p>\n            <code>LicenseConfigurationArn</code>\n
</p>\n        </li>\n      </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
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            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits":
{
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
          "type": "structure",
          "members": {
            "ReportGenerators": {
              "target": "com.amazonaws.licensemanager#ReportGeneratorList",
              "traits": {
                "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }

          }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
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                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {

      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {
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        "LicenseSpecifications": {
          "target": "com.amazonaws.licensemanager#LicenseSpecifications",
          "traits": {
            "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenseVersions": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
      "type": "structure",
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      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
           "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
      "type": "structure",
      "members": {
        "Licenses": {
          "target": "com.amazonaws.licensemanager#LicenseList",
          "traits": {
            "smithy.api#documentation": "<p>License details.</p>"
          }
        },

"NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenses": {
      "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },

     "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                    <code>ProductSKU</code>\n                </p>\n            </li>\n
    <li>\n                <p>\n                    <code>Fingerprint</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                    <code>Status</code>\n                </p>\n            </li>\n        </ul>"
```

```
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token
for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
```

```
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                "smithy.api#required": {}
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
      <ul>\n          <li>\n            <p>\n              <code>ParentArn</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>GranteePrincipalArn</code>\n            </p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
            "Grants": {
                "target": "com.amazonaws.licensemanager#GrantList",
                "traits": {
                    "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>ProductSKU</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                    <code>LicenseIssuerName</code>\n                </p>\n
</li>\n            <li>\n                <p>\n                    <code>LicenseArn</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                    <code>GrantStatus</code>\n                </p>\n            </li>\n            <li>\n
<p>\n
        <code>GranterAccountId</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
```

```
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
      "type": "structure",
      "members": {
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",
           "traits": {
            "smithy.api#documentation": "<p>Received grant details.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedLicenses": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists received licenses.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
```

```
            },
            {

        "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                    <code>ProductSKU</code>\n
            </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#GrantedLicenseList",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
        "type": "structure",
        "members": {
          "LicenseArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
            }
          },

          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>Status</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>IssuerName</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Beneficiary</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
```

```
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
    "type": "structure",
    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#GrantedLicenseList",
        "traits": {
          "smithy.api#documentation": "<p>Received license details.</p>"
        }
      },

      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FailedDependencyException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
```

```
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#InventoryFilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n are supported:</p>\n <ul>\n <li>\n <p>\n <code>account_id</code>
- The ID of the Amazon Web Services account that owns the resource.\n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
 </li>\n <li>\n <p>\n <code>application_name</code> - The name of the
application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n
 </li>\n <li>\n <p>\n <code>license_included</code> - The type of license included. \n
 Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values
are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-
server-web</code> | \n <code>windows-server-datacenter</code>.</p>\n </li>\n <li>\n
 <p>\n <code>platform</code> - The platform of the resource.\n Logical operators are
<code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n </li>\n <li>\n <p>\n
 <code>resource_id</code> - The ID of the resource. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n
 <code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical
operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> |
<code>NOT_EQUALS</code> (cross account).</p>\n </li>\n </ul>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
        "type": "structure",
        "members": {
          "ResourceInventoryList": {
            "target": "com.amazonaws.licensemanager#ResourceInventoryList",
            "traits": {
              "smithy.api#documentation": "<p>Information
about the resources.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
```

```
        "errors":
[
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n          <li>\n          <p>\n          <code>LicenseArns</code>\n          </p>\n          </li>\n
</ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
```

```
            "traits": {
                "smithy.api#documentation":
"<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
          "Tokens": {
            "target": "com.amazonaws.licensemanager#TokenList",
            "traits": {
              "smithy.api#documentation": "<p>Received token details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n consumption details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n are supported:</p>\n <ul>\n <li>\n <p>\n <code>resourceArn</code> - The ARN of the license configuration resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n <code>resourceType</code> - The resource type
```

(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators
are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}

```
        },
        "AssociationCount": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
      }
    },
    "com.amazonaws.licensemanager#ManagedResourceSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
      }
    },
    "com.amazonaws.licensemanager#MaxSize100": {

    "type": "integer",
      "traits": {
        "smithy.api#range": {
          "min": 1,
          "max": 100
        }
      }
    },
    "com.amazonaws.licensemanager#MaxSize3StringList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 3
        }
      }
    },
    "com.amazonaws.licensemanager#Message": {
      "type": "string"
    },
    "com.amazonaws.licensemanager#Metadata": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

    "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The value.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
    }
},
"com.amazonaws.licensemanager#MetadataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Metadata"
    }
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement maximum count is reached.</p>",
         "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#Options": {
    "type": "structure",
    "members": {
        "ActivationOverrideBehavior": {
            "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
            "traits": {
                "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter.</p>\n <ul>\n <li>\n <p>As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n
```

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</li>\n <li>\n <p>As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization.</p>\n </li>\n <li>\n <p>As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant.</p>\n </li>\n </ul>\n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n <p>Use this value to activate a grant without replacing any member accounts\n active grants for the same product.</p>\n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n <p>Use this value to activate a grant and disable other active grants in any\n member accounts
 for the same product. This action will also replace their\n previously activated grants with this activated grant.</p>\n </dd>\n </dl>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#OrganizationConfiguration": {
        "type": "structure",
        "members": {
            "EnableIntegration": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation":
 "<p>Enables Organizations integration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
    },
    "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 1
            }
```

```
        }
      },
      "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductInformationFilterList": {
            "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
            "traits": {
              "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n          <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n          <p>The following filters and are supported when
the resource type \n          is <code>SSM_MANAGED</code>:</p>\n
          <ul>\n            <li>\n              <p>\n                <code>Application Name</code> - The name of the
application.\n                Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>Application Publisher</code> - The publisher of the application.\n                Logical
operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n              <p>\n
<code>Application Version</code> - The version of the application.\n                Logical operator is
<code>EQUALS</code>.</p>\n            </li>\n            <li>\n              <p>\n                <code>Platform
Name</code> - The name of the platform.\n                Logical operator is <code>EQUALS</code>.</p>\n
</li>\n            <li>\n              <p>\n                <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
          </li>\n            <li>\n              <p>\n                <code>Tag:key</code> - The key of a tag attached to an
Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>.  The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key.\n                </p>\n            </li>\n            <li>\n              <p>\n
<code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from
automated discovery.\n                Logical operator is <code>NOT_EQUALS</code>.</p>\n            </li>\n
<li>\n              <p>\n                <code>License Included</code> - The type of license included.\n                Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n                Possible values are:
 <code>sql-server-enterprise</code> | \n                <code>sql-server-standard</code> | \n                <code>sql-server-
web</code> |  \n                <code>windows-server-datacenter</code>.</p>\n            </li>\n          </ul>\n
<p>The following filters and logical operators are supported when the resource type\n          is
<code>RDS</code>:</p>\n          <ul>\n            <li>\n              <p>\n                <code>Engine Edition</code> -
The edition of the database engine.\n                Logical operator is <code>EQUALS</code>.\n                Possible
values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code>.</p>\n            </li>\n            <li>\n              <p>\n                <code>License Pack</code> - The license
```

```
pack.\n            Logical operator is <code>EQUALS</code>.\n            Possible values are: <code>data
guard</code> | \n            <code>diagnostic pack sqlt</code> | \n
          <code>tuning pack sqlt</code> | \n            <code>ols</code> | \n            <code>olap</code>.</p>\n
    </li>\n        </ul>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
          }
        },
        "com.amazonaws.licensemanager#ProductInformationFilter": {
          "type": "structure",
          "members": {
            "ProductInformationFilterName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
              }
            },
            "ProductInformationFilterValue": {
              "target": "com.amazonaws.licensemanager#StringList",

           "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
              }
            },
            "ProductInformationFilterComparator": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes product information filters.</p>"
          }
        },
        "com.amazonaws.licensemanager#ProductInformationFilterList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#ProductInformationFilter"
          }
        },
        "com.amazonaws.licensemanager#ProductInformationList": {
```

```
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
      }
    },
    "com.amazonaws.licensemanager#ProvisionalConfiguration": {
      "type": "structure",
      "members": {
        "MaxTimeToLiveInMinutes": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
      }
    },
    "com.amazonaws.licensemanager#RateLimitExceededException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "RateLimitExceeded",
          "httpResponseCode": 429
        },
        "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 429
      }
    },
    "com.amazonaws.licensemanager#ReceivedMetadata": {
      "type": "structure",
      "members": {
        "ReceivedStatus": {
          "target": "com.amazonaws.licensemanager#ReceivedStatus",
          "traits": {
            "smithy.api#documentation": "<p>Received status.</p>"
          }
        },
        "ReceivedStatusReason": {
```

```
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
              "smithy.api#documentation": "<p>Received
status reason.</p>"
            }
          },
          "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed operations.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
        }
      },
      "com.amazonaws.licensemanager#ReceivedStatus": {
        "type": "enum",
        "members": {
          "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
          },
          "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue":
"PENDING_ACCEPT"
            }
          },
          "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "REJECTED"
            }
          },
          "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ACTIVE"
            }
          },
          "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
```

```
            "smithy.api#enumValue": "FAILED_WORKFLOW"
          }
        },
        "DELETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DELETED"
          }
        },
        "DISABLED": {
          "target": "smithy.api#Unit",
           "traits": {
            "smithy.api#enumValue": "DISABLED"
          }
        },
        "WORKFLOW_COMPLETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "WORKFLOW_COMPLETED"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#RedirectException": {
      "type": "structure",
      "members": {
        "Location": {
          "target": "com.amazonaws.licensemanager#Location",
          "traits": {
            "smithy.api#httpHeader": "Location"
          }
        },
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
         "smithy.api#error": "client",
        "smithy.api#httpError": 308
      }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
      },
      "output": {
```

```
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
```

```
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#RenewType":
{
      "type": "enum",
      "members": {
        "NONE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "None"
          }
        },
        "WEEKLY": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Weekly"
          }
        },
        "MONTHLY": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Monthly"
          }
        }
      }
    },
```

```
    "com.amazonaws.licensemanager#ReportContext": {
      "type": "structure",
      "members": {
        "licenseConfigurationArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {

    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this
generator reports on.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
      }
    },
    "com.amazonaws.licensemanager#ReportFrequency": {
      "type": "structure",
      "members": {
        "value": {
          "target": "com.amazonaws.licensemanager#Integer",
          "traits": {
            "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated.  \n        The only supported value is <code>1</code>.</p>"
          }
        },
        "period": {
          "target": "com.amazonaws.licensemanager#ReportFrequencyType",

          "traits": {
            "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
or monthly.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
      }
    },
    "com.amazonaws.licensemanager#ReportFrequencyType": {
      "type": "enum",
      "members": {
        "DAY": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DAY"
          }
```

```
            },
            "WEEK": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "WEEK"
               }
            },
            "MONTH": {
               "target": "smithy.api#Unit",
               "traits":
{
                  "smithy.api#enumValue": "MONTH"
               }
            }
         }
      },
      "com.amazonaws.licensemanager#ReportGenerator": {
         "type": "structure",
         "members": {
            "ReportGeneratorName": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Name of the report generator.</p>"
               }
            },
            "ReportType": {
               "target": "com.amazonaws.licensemanager#ReportTypeList",
               "traits": {
                  "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
               }
            },
            "ReportContext": {
               "target": "com.amazonaws.licensemanager#ReportContext",
               "traits": {
                  "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
               }
            },
            "ReportFrequency": {
               "target": "com.amazonaws.licensemanager#ReportFrequency",
               "traits": {
                  "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
               }
            },
            "LicenseManagerReportGeneratorArn": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
```

```
            }
          },
          "LastRunStatus": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
            }
          },
          "LastRunFailureReason":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
            }
          },
          "LastReportGenerationTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
            }
          },
          "ReportCreatorAccount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",

      "traits": {
              "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
          },
          "S3Location": {
            "target": "com.amazonaws.licensemanager#S3Location",
            "traits": {
              "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
            }
          },
          "CreateTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Time the report was created.</p>"
            }
          },
```

```
        "Tags": {
          "target": "com.amazonaws.licensemanager#TagList",
          "traits": {
            "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
          }

}
    },
    "traits": {
      "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
    }
  },
  "com.amazonaws.licensemanager#ReportGeneratorList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ReportGenerator"
    }
  },
  "com.amazonaws.licensemanager#ReportGeneratorName": {
    "type": "string",
    "traits": {
      "smithy.api#length": {
        "min": 1,
        "max": 100
      }
    }
  },
  "com.amazonaws.licensemanager#ReportType": {
    "type": "enum",
    "members": {
      "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
        }

  },
        "LICENSE_CONFIGURATION_USAGE_REPORT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "LicenseConfigurationUsageReport"
          }
        }
    }
  },
  "com.amazonaws.licensemanager#ReportTypeList": {
    "type": "list",
    "member": {
```

```
            "target": "com.amazonaws.licensemanager#ReportType"
          }
        },
        "com.amazonaws.licensemanager#ResourceInventory": {
          "type": "structure",
          "members": {
            "ResourceId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>ID of the resource.</p>"
              }
            },
            "ResourceType": {
              "target": "com.amazonaws.licensemanager#ResourceType",
              "traits":
{
                "smithy.api#documentation": "<p>Type of resource.</p>"
              }
            },
            "ResourceArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
              }
            },
            "Platform": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Platform of the resource.</p>"
              }
            },
            "PlatformVersion": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
              }
            },
            "ResourceOwningAccountId":
{
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
          }
```

```
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ResourceInventory"
    }
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

         "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
```

```
                "smithy.api#enumValue": "EC2_INSTANCE"
              }
            },
            "EC2_HOST": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "EC2_HOST"
              }
            },
            "EC2_AMI": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "EC2_AMI"
              }
            },
            "RDS": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "RDS"
              }
            },
            "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
              "target": "smithy.api#Unit",
              "traits": {
                 "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#S3Location": {
          "type": "structure",
          "members": {
            "bucket": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
              }
            },
            "keyPrefix": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanager#ServerInternalException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "InternalError",
            "httpResponseCode": 500
          },
          "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
          "smithy.api#error": "server",
          "smithy.api#httpError": 500
        }
      },
      "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 4096
          }
        }
      },
      "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits":
{
          "smithy.api#length": {
            "min": 0,
            "max": 400
          },
          "smithy.api#pattern": "^[\\s\\S]+$"
        }
      },
      "com.amazonaws.licensemanager#String": {
        "type": "string"
      },
      "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#Tag": {
```

```
        "type": "structure",
        "members": {
          "Key": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Tag key.</p>"
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Tag value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Tag"
        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
          {
            "target":
"com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
```

```
            "TokenId": {
              "target": "com.amazonaws.licensemanager#String",
               "traits": {
                 "smithy.api#documentation": "<p>Token ID.</p>"
              }
            },
            "TokenType": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                 "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
              }
            },
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                 "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
              }
            },
            "ExpirationTime": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                 "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
 format.</p>"
              }
            },
            "TokenProperties": {
              "target": "com.amazonaws.licensemanager#MaxSize3StringList",
              "traits": {
                 "smithy.api#documentation": "<p>Data specified by the caller.</p>"
              }
            },
            "RoleArns": {
              "target": "com.amazonaws.licensemanager#ArnList",
              "traits": {
                 "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                 "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
              }
            }
          },
          "traits": {
```

```
            "smithy.api#documentation": "<p>Describes a token.</p>"
        }
    },
    "com.amazonaws.licensemanager#TokenList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#TokenData"
        }
    },
    "com.amazonaws.licensemanager#TokenString": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 4096
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#TokenType": {
        "type": "enum",
        "members": {
            "REFRESH_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REFRESH_TOKEN"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                     "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanager#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
        },
        "output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
         }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseConfigurationStatus": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
            "traits": {
                "smithy.api#documentation": "<p>New status of the license configuration.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {

 "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
 configuration is licenseAffinityToHost.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New name
 of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New description of the license configuration.</p>"
            }
        },
        "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
```

```
            "traits": {
                "smithy.api#documentation": "<p>New product information.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        }
    },
    "traits":
{
        "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
    "type": "structure",
    "members": {},
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
       },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
```

```
            {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n          <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
          "type": "structure",
          "members": {
            "LicenseManagerReportGeneratorArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                "smithy.api#required": {}
              }
            },
            "ReportGeneratorName": {
              "target": "com.amazonaws.licensemanager#ReportGeneratorName",
              "traits": {
                "smithy.api#documentation": "<p>Name of the report generator.</p>",
                "smithy.api#required": {}
              }
            },
            "Type": {
              "target": "com.amazonaws.licensemanager#ReportTypeList",
              "traits": {
                "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n          <ul>\n            <li>\n              <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n              <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n          </ul>",
                "smithy.api#required": {}
              }
            },
            "ReportContext": {
              "target": "com.amazonaws.licensemanager#ReportContext",
              "traits": {
```

```
                "smithy.api#documentation": "<p>The report context.</p>",
                "smithy.api#required": {}
              }
            },
            "ReportFrequency": {
              "target": "com.amazonaws.licensemanager#ReportFrequency",
              "traits":
{
                "smithy.api#documentation": "<p>Frequency by which reports are generated.</p>",
                "smithy.api#required": {}
              }
            },
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientRequestToken",
              "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            },
            "Description": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
          },
          "errors": [
```

```
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
              "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
              "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n          <p>You can update the license specifications of AMIs, instances, and
hosts.\n          You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
          }
        },

        "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                "smithy.api#required": {}
              }
            },
            "AddLicenseSpecifications": {
              "target": "com.amazonaws.licensemanager#LicenseSpecifications",
              "traits": {
                "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
              }
            },
```

```
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation":
"<p>ARNs of the license configurations to remove.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
```

```
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
      "type": "structure",
      "members": {
        "S3BucketArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
          }
        },
        "SnsTopicArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
          }
        },
        "OrganizationConfiguration": {
          "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
          }
        },
        "EnableCrossAccountsDiscovery": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"

      }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#UsageOperation": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
```

```
                "min": 0,
                "max": 50
            }
        }
      },
      "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

       "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      }
    }
}
CheckoutLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
```

ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.105 aws-sdk-go-v2-internal-configsources 1.3.34

1.105.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
  - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
```

```
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
```

```
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
 Region:       region,
 ServiceID:    ServiceID,
 OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
 spanInitializeStart
 RegisterServiceMetadata
 legacyEndpointContextSetter
 SetLogger
 OperationInputValidation
 spanInitializeEnd
 Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 OperationSerializer
 Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
 Finalize stack step
 spanRetryLoop
 Retry
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
```

```
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
```

```
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi
ListLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
```

```
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
```

```
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
```

```
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
= addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
```

```
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
```

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
```

```
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
```

```
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
```

```
//   - Fingerprint
//
//   - Status
Filters
[]types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListLicensesOutput struct {

// License details.
Licenses []types.License

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
```

```
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
```

DisassociateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger

OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint

```
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}
```

```
func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go
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```
AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
```

```
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
```

```
// [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string
```

```
 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
```

```
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
```

```
{
  "smithy": "2.0",
  "shapes": {
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
          "type": "integer"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
          "type": "long"
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
          "type": "operation",
          "input": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
          },
          "output": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
          },
          "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },

    {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/DeregisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The type of name to filter by.</p>"
           }
        },
        "Values": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
          }
        },
        "Operator": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
          "traits": {
            "smithy.api#documentation": "<p>An operator for filtering results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
      "type":
 "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
      },
      "output": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
```

```
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
```

```
        "traits": {
            "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource specified \n\t\t\tin the request.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
          }
        },
        "SubscriptionProviderStatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
          }
        },
        "LastSuccessfulDataRetrievalTime": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
      },
```

```
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/GetServiceSettings"

        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
      "type": "structure",
      "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
      "type": "structure",
      "members": {
        "LinuxSubscriptionsDiscovery": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
          "traits": {
            "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
          }
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
          "traits": {
            "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
```

```
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
          "AmiId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
        },
        "Region": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
        },
        "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
                "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
        },
        "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
        },
        "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
        },
        "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
            }
        },
```

```
            "SubscriptionProviderCreateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
               }
            },
            "SubscriptionProviderUpdateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
               }
            },
            "DualSubscription": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
               }
            },
            "RegisteredWithSubscriptionProvider": {
               "target": "smithy.api#String",
               "traits": {

     "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
```

```
        "traits": {
            "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager Linux Subscriptions",
```

```
        "arnNamespace": "license-manager-linux-subscriptions",
        "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
      },
      "aws.auth#sigv4": {
        "name": "license-manager-linux-subscriptions"
      },
      "aws.protocols#restJson1": {},
      "smithy.api#cors": {
        "additionalAllowedHeaders": [
          "*",
          "content-type",
          "x-amz-content-sha256",
          "x-amz-user-agent",
          "x-amzn-platform-id",
          "x-amzn-trace-id"
        ],
        "additionalExposedHeaders": [
          "x-amzn-errortype",
          "x-amzn-requestid",
          "x-amzn-trace-id"
        ]
      },
      "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
      "smithy.api#title": "AWS License Manager Linux Subscriptions",
      "smithy.rules#endpointRuleSet": {
        "version": "1.0",
        "parameters": {
          "Region": {
            "builtIn": "AWS::Region",
            "required": false,
            "documentation": "The AWS region used to dispatch the request.",
            "type": "String"
          },
          "UseDualStack": {
            "builtIn": "AWS::UseDualStack",
            "required": true,
            "default": false,
            "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
            "type": "Boolean"
          },
          "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
 configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
```

```
            "type": "Boolean"
        },
        "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
        }
    },
    "rules": [
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            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }

],
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
                },
                {
                    "conditions": [],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
```

```
                                },
                                true
                            ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
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                        "conditions": [],
                        "endpoint": {
                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"

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            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "isSet",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {

            "fn": "aws.partition",
                                    "argv": [
```

```
                {
                  "ref": "Region"
                }
              ],
              "assign": "PartitionResult"
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {

                  "ref": "UseFIPS"
                    },
                    true
                  ]
                },
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }

],
              "rules": [
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                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {
                              "ref": "PartitionResult"

},
                                "supportsFIPS"
                            ]
                          }
```

```
                ]
              },
              {
                "fn": "booleanEquals",
                "argv": [
                  true,
                  {
                    "fn": "getAttr",
                    "argv": [

                     {
                          "ref": "PartitionResult"
                      },
                      "supportsDualStack"
                    ]
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [],

    "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                      "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
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            "type": "tree"
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                "type": "tree"
              },
              {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",

                "type": "error"
              }
            ],
```

```
                "type": "tree"
            },
            {

        "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseFIPS"
                        },
                        true
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

                "fn": "booleanEquals",
                            "argv": [
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
                                true

                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [
                                {
                                    "conditions": [],
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                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                        "headers": {}
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```
                    },
                    "type": "endpoint"
                  }
                ],
                "type": "tree"
              }
            ],
            "type": "tree"
          },
          {
            "conditions": [],
            "error": "FIPS is enabled
but this partition does not support FIPS",
            "type": "error"
          }
        ],
        "type": "tree"
      },
      {
        "conditions": [
          {
            "fn": "booleanEquals",
            "argv": [
              {
                "ref": "UseDualStack"
              },
              true

    ]
          }
        ],
        "rules": [
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  true,
                  {
                    "fn": "getAttr",
                    "argv": [
                      {

                        "ref": "PartitionResult"
                      },
                      "supportsDualStack"
                    ]
                  }
```

```
                ]
              }
            ],
            "rules": [
              {
                "conditions": [],
                "rules": [

        {
                        "conditions": [],
                        "endpoint": {
                          "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                          "properties": {},
                          "headers": {}
                        },
                        "type": "endpoint"
                      }
                    ],
                    "type": "tree"

                }
                    ],
                    "type": "tree"
                  },
                  {
                    "conditions": [],
                    "error": "DualStack is enabled but this partition does not support DualStack",
                    "type": "error"
                  }
                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                      "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
                  }
                ],
                "type": "tree"
```

```
                    }
                  ],
                  "type": "tree"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [],
              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
          ],
          "type": "tree"
        }
      ]
    },
    "smithy.rules#endpointTests": {
      "testCases": [
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

      }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
```

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            "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
                  }
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true
                }
              },
              {
                "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
                  }

        },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                  }
                },
                "params": {
                  "Region": "cn-north-1",
                  "UseFIPS": true,
                  "UseDualStack": true
                }
              },
              {

          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                  }
                },
```

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      "params": {
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        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
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```

```
      "expect": {
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        }

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        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
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          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
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        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {

    "Region": "us-iso-east-1",
        "UseFIPS": true,
```

```
            "UseDualStack": true
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        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS":
false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
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      "Region": "us-isob-east-1",
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      "UseDualStack": true
    }
  },
  {
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    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
       }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {

   "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
      "endpoint": {
        "url": "https://example.com"
```

```
                }

        },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://example.com"
                  }
                },
                "params": {
                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {

                "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                "expect": {
                  "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {

  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
```

```
                }
              },
              {
                "documentation": "Missing region",
                "expect": {
                  "error": "Invalid Configuration: Missing Region"
                }
              }
            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled LinuxSubscriptionsDiscovery"

      },
            {
              "name": "Disabled",
              "value": "Disabled",
              "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
        "type": "structure",
        "members": {
          "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
              "smithy.api#documentation":
"<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
              "smithy.api#required": {}
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },

 {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptionInstances"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "Instances"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
```

```
            "Filters": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>.</p>\n        <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto streamline results:</p>\n        <ul>\n          <li>\n  <p>\n              <code>AccountID</code>\n            </p>\n          </li>\n          <li>\n            <p>\n    <code>AmiID</code>\n            </p>\n          </li>\n          <li>\n            <p>\n <code>DualSubscription</code>\n            </p>\n          </li>\n          <li>\n            <p>\n <code>InstanceID</code>\n            </p>\n          </li>\n          <li>\n            <p>\n <code>InstanceType</code>\n            </p>\n          </li>\n          <li>\n            <p>\n <code>ProductCode</code>\n            </p>\n          </li>\n          <li>\n            <p>\n <code>Region</code>\n            </p>\n          </li>\n          <li>\n            <p>\n <code>Status</code>\n            </p>\n          </li>\n          <li>\n            <p>\n <code>UsageOperation</code>\n            </p>\n          </li>\n        </ul>\n        <p>For each filter, you can use one of the following <code>Operator</code>\n values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n          <li>\n            <p>\n <code>contains</code>\n            </p>\n          </li>\n          <li>\n            <p>\n <code>equals</code>\n            </p>\n          </li>\n          <li>\n            <p>\n <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to\n start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                "smithy.api#length": {
                  "min": 1,
                  "max": 16384
                }
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
```

```
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {

       "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
           {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptions"
          },
          "smithy.api#idempotent": {},
```

```
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",

   "items": "Subscriptions"
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
         "type": "structure",
         "members": {
            "Filters": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n         <p>The valid names for this filter are:</p>\n         <ul>\n
<li>\n            <p>\n               <code>Subscription</code>\n            </p>\n         </li>\n         </ul>\n
<p>The
 valid Operators for this filter are:</p>\n         <ul>\n            <li>\n               <p>\n
<code>contains</code>\n            </p>\n         </li>\n         <li>\n            <p>\n
<code>equals</code>\n            </p>\n         </li>\n         <li>\n            <p>\n
<code>Notequal</code>\n            </p>\n         </li>\n      </ul>"
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                     "min": 1,
                     "max": 16384
                  }
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
          "Subscriptions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
```

```
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }

    },
     "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSources": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
            "traits": {
              "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }

  },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
     },
     "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
```

```
        "members": {
          "RegisteredSubscriptionProviders": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request.</p>"
            }
          },

          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {

          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{resourceArn}"
```

```
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
         }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
```

```
            },
            {
              "name": "CONTAINS",
              "value": "Contains",
              "documentation": "Contains operator"
            }
          ],
          "smithy.api#length": {
            "min": 1,
            "max": 20
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled OrganizationIntegration"
            },
            {
              "name": "Disabled",
              "value": "Disabled",
              "documentation": "Disabled OrganizationIntegration"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
                }
            }
        },
        "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation":
"<p>The Linux subscription provider that you registered.</p>"
                }
            },
            "SubscriptionProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
```

```
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
             "traits": {
               "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
               "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits":
{
               "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
```

```
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

    }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "InProgress",
              "value": "InProgress",
              "documentation": "InProgress status"
            },
            {
              "name": "Completed",
              "value": "Completed",
              "documentation": "Completed status"
            },
            {
              "name": "Successful",
              "value": "Successful",
              "documentation": "Successful status"
            },
            {
              "name": "Failed",
              "value": "Failed",
              "documentation": "Failed status"
            }
          ]
        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#length": {
                    "min": 1,
                    "max": 100
                }
            }
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            },
            "smithy.api#uniqueItems": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
{
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [

 {
              "name": "RedHat",
              "value": "RedHat",
              "documentation": "RedHat subscription provider namespace"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
```

```
                "name": "ACTIVE",
                "value": "ACTIVE",
                "documentation": "ACTIVE status"
            },
            {
                "name": "INVALID",
                "value": "INVALID",

"documentation": "INVALID status"
            },
            {
                "name": "PENDING",
                "value": "PENDING",
                "documentation": "PENDING status"
            }
        ]
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#sensitive": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
              "method": "PUT",
              "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
          "type": "structure",
          "members":
 {
            "resourceArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            },
            "tags": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }

        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
          "type": "map",
```

```
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation":
"<p>The request was denied due to request throttling.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
           "smithy.api#http": {
            "method": "DELETE",
```

```
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tagKeys": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
            "traits": {

           "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
              "smithy.api#httpQuery": "tagKeys",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
```

```
    },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/UpdateServiceSettings"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
      "type": "structure",
      "members": {
        "LinuxSubscriptionsDiscovery": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
          "traits": {
            "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
            "smithy.api#required": {}
          }
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
          "traits": {
            "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
            "smithy.api#required": {}
          }
        },
        "AllowUpdate": {
          "target":
 "smithy.api#Boolean",
          "traits": {
            "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
```

```
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
             "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
            }

       },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
```

```
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
```

```
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string
```

```
// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
```

```
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
```

```
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
```

spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID

ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
```

```
        "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 2
                    }
                }
            },
            "DomainCredentialsProvider": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
                }
            },
            "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
```

```
{
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "SELF_MANAGED",
              "value": "SELF_MANAGED",
              "documentation": "SELF_MANAGED type of Active Directory"
            },
            {
              "name": "AWS_MANAGED",
              "value": "AWS_MANAGED",
              "documentation": "AWS_MANAGED type of Active Directory"
            }
          ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

```
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n        <note>\n        <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http":
 {
              "code": 200,
              "method": "POST",
              "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                "smithy.api#required": {}
              }
```

```
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
               }
            },
            "Tags": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
               "traits": {
                  "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
               }
            }
         },
         "traits": {

      "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
         "type": "structure",
         "members": {
            "InstanceUserSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
         "type": "integer"
      },
      "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
             }
         },
         "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
```

```
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

          {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS)
license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
             },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
```

```
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for
the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
            }
```

```
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/DeregisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
```

```
    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/user/DisassociateUser"
        },
        "smithy.api#idempotent": {}
```

```
    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
          }
        },
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
          }
        },
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
          }
        },
        "InstanceUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
          }
        },
        "Domain": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
      "type": "structure",
```

```
        "members": {
          "InstanceUserSummary":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
              "smithy.api#length": {
                "min": 1
              },

    "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Attribute": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
            }
          },
          "Operation": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
            }
```

```
            },
            "Value": {
               "target": "smithy.api#String",
               "traits":
{
                  "smithy.api#documentation": "<p>Value of the filter.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
         "type": "union",
         "members": {
            "ActiveDirectoryIdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
         "type": "structure",
         "members": {
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
```

```
        "Settings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
            "smithy.api#required": {}
          }
        },
        "Product": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "IdentityProviderArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
          }
        },
        "FailureMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an identity provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
      "type": "list",
      "member": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
      }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
      "type": "structure",
      "members": {
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
            "smithy.api#required": {}
          }
        },
        "Products": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
           "traits": {
            "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
            "smithy.api#required": {}
          }
        },
        "LastStatusCheckDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The date of the last status check.</p>"
          }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },

    "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
           }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
          }
        },
```

```
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
               }
            },
            "AssociationDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
               }
            },
            "DisassociationDate": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
             "smithy.api#error": "server",
            "smithy.api#httpError": 500
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
```

```
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
```

```
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

       "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
```

```
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
{
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
```

```
                }
              ]
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [
                {

                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [],
              "endpoint": {
                "url": {
                  "ref": "Endpoint"
                },

"properties": {},
                "headers": {}
              },
              "type": "endpoint"
            }
```

```
      ],
      "type": "tree"
    },
    {
      "conditions": [
        {
          "fn": "isSet",
          "argv": [
            {
              "ref": "Region"
            }
          ]
        }
      ],
      "rules": [
        {
          "conditions": [
            {
              "fn": "aws.partition",

              "argv": [
                {
                  "ref": "Region"
                }
              ],
              "assign": "PartitionResult"
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },

true

                  ]
                },
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
```

```
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
"fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  },
                {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }
            ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                      "properties": {},
                      "headers": {}
```

```
                    },
                    "type": "endpoint"
                }

    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [

  {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "fn": "getAttr",
                                "argv": [

                {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            },
                            true
                        ]
                    }
```

```
                                ],
                                "rules": [
                                    {
                                        "conditions": [],
                                        "endpoint": {

                "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "FIPS is enabled but this partition does not support FIPS",
                                "type": "error"

}
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true
                                    ]
                                }
                            ],
                            "rules": [
                                {

        "conditions": [
                                        {
                                            "fn": "booleanEquals",
                                            "argv": [
                                                true,
                                                {
                                                    "fn": "getAttr",
                                                    "argv": [
                                                        {
```

```
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]

        }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }

                ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "DualStack is enabled but this partition does not support DualStack",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "endpoint": {
                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

            "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ],
    "type": "tree"
  }
],
"type": "tree"
```

```
            },
            {
              "conditions": [],
              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
          ]
        },
        "smithy.rules#endpointTests": {
          "testCases": [
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
              "expect":
{
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",

      "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
```

```
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS":
true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
```

```
        "endpoint":
{
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          }
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        "params": {
          "Region": "cn-north-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
          }
        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": false,
           "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint":
{
            "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
```

```
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
```

```
            "params": {
              "Region": "us-iso-east-1",
              "UseFIPS": true,
              "UseDualStack": false

    }
          },
          {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "error": "DualStack is enabled but this partition does not support DualStack"
            },
            "params": {
              "Region": "us-iso-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
              }

        },
            "params": {
              "Region": "us-iso-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
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            },
            "params": {
              "Region": "us-isob-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack
disabled",
            "expect": {
              "endpoint": {
```

```
                "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
              }
            },
            "params": {
              "Region": "us-isob-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "error": "DualStack is enabled but this partition does not support DualStack"
            },
            "params": {
              "Region": "us-isob-east-1",

"UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
              }
            },
            "params": {
              "Region": "us-isob-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
            "expect": {

           "endpoint": {
                "url": "https://example.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": false,
              "Endpoint": "https://example.com"
            }
```

```
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack":
false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "Missing region",
      "expect": {
        "error": "Invalid Configuration: Missing Region"
      }
    }
  ],
```

```
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
        "type": "structure",
        "members": {
          "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
               "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
          },
          "HealthStatus": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
            "traits": {
              "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
          },
          "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information
 about a Remote Desktop Services (RDS) license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
            }
          },
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of license server.</p>"
```

```
            }
          },
          "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

   "traits": {
                "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is one.</p>"
            }
          },
          "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits":
 {
              "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server.</p>"
            }
          },
          "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint</p>"
            }
          },
          "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
          },
```

```
          "CreationTime": {
              "target": "smithy.api#Timestamp",
              "traits": {
                  "smithy.api#documentation": "<p>The timestamp when License Manager created the license server endpoint.</p>"
              }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

  "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "PROVISIONING",
              "value": "PROVISIONING",
              "documentation": ""
            },
            {
              "name": "PROVISIONING_FAILED",
              "value": "PROVISIONING_FAILED",
              "documentation": ""
            },
            {
              "name": "PROVISIONED",
              "value": "PROVISIONED",
              "documentation": ""
            },
            {
              "name": "DELETING",
              "value": "DELETING",
              "documentation": ""
            },
            {
```

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            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""

          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
    }
},
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
    "type": "structure",
    "members": {
        "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>",
```

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                "smithy.api#required": {}
              }
            },
            "ServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {

            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
```

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        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/ListIdentityProviders"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "IdentityProviderSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use
 the following filters to streamline results:</p>\n        <ul>\n          <li>\n            <p>Product</p>\n          </li>\n
        <li>\n            <p>DirectoryId</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
```

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        "type": "structure",
        "members": {
          "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

          "traits": {
              "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
              "smithy.api#required": {}
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
         "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
```

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    {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members":
{
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n
        <li>\n            <p>InstanceId</p>\n          </li>\n        </ul>"
            }
```

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            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next
 token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
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            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/license-server/ListLicenseServerEndpoints"
            },

         "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "LicenseServerEndpoints"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
         "type": "structure",
         "members": {
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                  "smithy.api#range": {
                     "min": 1,
                     "max": 100
                  }
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n               <p>IdentityProviderArn</p>\n            </li>\n         </ul>"
               }
            },
```

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            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
         "type": "structure",
         "members": {
            "LicenseServerEndpoints": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
                "traits": {
                  "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
         "type":
 "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
{
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
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            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating.
 This is the nextToken \n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
          "type": "structure",
          "members": {
            "ProductUserSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
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empty, \n\tthere are additional elements that the service
 hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
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    }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
      "Tags": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which
 provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
```

```
      "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n        <ul>\n
   <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n          </li>\n
<li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummaries": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username":
{
            "target": "smithy.api#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The user name from the identity provider for this product user.</p>",
                "smithy.api#required": {}
            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {

        "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
            }
        },
        "SubscriptionStartDate": {
            "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
          },
          "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
          "RdsSalCredentialsProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider":
 {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {

    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits":
 {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation":
 "<p>Metadata that describes the results of an identity provider operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
```

```
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",

     "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
              "smithy.api#length": {
                "min": 1
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
          "smithy.api#length": {

       "min": 5,
            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
```

```
        "members": {
          "Endpoint": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
             "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {

  "target": "smithy.api#String"
            }
        },
```

```
        "traits": {
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

             "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

        },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n        <note>\n          <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/StartProductSubscription"
          }

    }
     },
     "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
       "type": "structure",
       "members": {
         "Username": {
           "target": "smithy.api#String",
           "traits": {
             "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
             "smithy.api#required": {}
           }
         },
         "IdentityProvider": {
           "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
           "traits": {
             "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
```

```
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {

 "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n         <p>Valid values:
<code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n
</p>",
                "smithy.api#required": {}
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
              }

 }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

    },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

    },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/user/StopProductSubscription"
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
      "type": "structure",
      "members": {
        "Username": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"

            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
```

```
                "smithy.api#required": {}
            }

    }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {

"min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
"<p>Adds tags to a resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation":
"<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
```

```
            "type": "structure",
            "members": {},
            "traits": {
                "smithy.api#output": {}
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Tags": {
            "type": "map",
            "key": {
                "target": "smithy.api#String"
            },
            "value": {
                "target": "smithy.api#String"
            },
            "traits": {
                "smithy.api#length": {
                    "min": 0,
                    "max": 50
                },
                "smithy.api#sensitive": {}
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
    {
            "type": "structure",
            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
    request.</p>",
                "smithy.api#error": "client"
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
            "type": "operation",
            "input": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
            },
            "output": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
            },
            "errors": [
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
                },
```

```
            {

             "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
              "method": "DELETE",
              "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}

          }
            },
            "TagKeys": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
              "traits": {
                "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                "smithy.api#httpQuery": "tagKeys",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
```

```
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
          "smithy.api#http": {

      "code": 200,
            "method": "POST",
            "uri": "/identity-provider/UpdateIdentityProviderSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
```

```
            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
               }
            },
            "UpdateSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
               "traits": {
                  "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n               <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
      <li>\n               <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n               <p>Security
 group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n         </ul>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
         "type": "structure",
         "members": {
            "IdentityProviderSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
               "traits": {
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
         "type": "structure",
         "members": {
            "AddSubnets": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
```

```
                "smithy.api#required": {}
              }
            },
            "RemoveSubnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                "smithy.api#required": {}
              }
            },
            "SecurityGroupId": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
              "traits": {
                "smithy.api#documentation": "<p>A security group ID that
 allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for
activation servers.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
          }
        }
      }
    }
    ListReceivedLicenses
     Initialize stack step
      spanInitializeStart
      RegisterServiceMetadata
      legacyEndpointContextSetter
      SetLogger
      spanInitializeEnd
     Serialize stack step
      spanBuildRequestStart
      setOperationInput
```

ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
{
  "smithy": "2.0",
  "metadata": {
     "suppressions": [
        {
           "id": "HttpMethodSemantics",
           "namespace": "*"
        },
        {
           "id": "HttpResponseCodeSemantics",
           "namespace": "*"
        },
        {
           "id": "PaginatedTrait",
           "namespace": "*"
        },
        {
           "id": "HttpHeaderTrait",
           "namespace": "*"
        },
        {
           "id": "HttpUriConflict",
           "namespace": "*"
        },
        {
           "id": "Service",
```

```
            "namespace": "*"
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
             },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateToken"
            },
            {
                "target": "com.amazonaws.licensemanager#DeleteGrant"
```

```
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseUsage"
    },
    {
      "target": "com.amazonaws.licensemanager#GetServiceSettings"
    },
    {
      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
     },
    {
      "target": "com.amazonaws.licensemanager#ListDistributedGrants"
    },
    {
```

```
    "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenses"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
  },
  {

   "target": "com.amazonaws.licensemanager#ListLicenseVersions"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedGrants"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
  },
  {
    "target": "com.amazonaws.licensemanager#ListResourceInventory"
  },
  {
    "target": "com.amazonaws.licensemanager#ListTagsForResource"
  },
  {
    "target": "com.amazonaws.licensemanager#ListTokens"
  },
  {
    "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
   },
  {
    "target": "com.amazonaws.licensemanager#RejectGrant"
  },
```

```
            {
              "target": "com.amazonaws.licensemanager#TagResource"
            },
            {
              "target": "com.amazonaws.licensemanager#UntagResource"
            },
            {
              "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
            },
            {
              "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
            },
            {
              "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
            },
            {
              "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
            }
          ],
          "traits": {
            "aws.api#service": {
               "sdkId": "License Manager",
              "arnNamespace": "license-manager",
              "cloudFormationName": "LicenseManager",
              "cloudTrailEventSource": "licensemanager.amazonaws.com",
              "endpointPrefix": "license-manager"
            },
            "aws.auth#sigv4": {
              "name": "license-manager"
            },
            "aws.protocols#awsJson1_1": {},
            "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software
vendors across multiple \n         Amazon Web Services accounts and on-premises servers.</p>",
            "smithy.api#title": "AWS License Manager",
            "smithy.api#xmlNamespace": {
              "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
            },
            "smithy.rules#endpointRuleSet": {
              "version": "1.0",
              "parameters": {
                "Region": {
                  "builtIn": "AWS::Region",
                  "required": false,
                  "documentation": "The AWS region used to dispatch the request.",
                  "type": "String"
                },
                "UseDualStack": {
                  "builtIn": "AWS::UseDualStack",
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            "required": true,
            "default": false,
            "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
            "type": "Boolean"
          },
          "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
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        "rules": [
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            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]

              }
            ],
            "type": "tree",
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
```

```
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {

"conditions": [
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                    "fn": "booleanEquals",
                    "argv": [
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                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
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                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                     },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Region"
                    }
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
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                    "argv": [
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                            "ref": "Region"
                        }
                    ],
                    "assign": "PartitionResult"
                }
            ],
            "type": "tree",
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref":
"UseFIPS"
                                },
                                true
                            ]
                        },
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseDualStack"
                                },
                                true
                            ]
                        }
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                    "rules": [
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                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        true,
                                        {
                                            "fn": "getAttr",
                                            "argv": [
                                                {
                                                    "ref": "PartitionResult"
                                                },
```

```
                                    "supportsFIPS"
                                ]

                            }
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },

    "supportsDualStack"
                                ]
                            }
                        ]
                    }
                ],
                "type": "tree",
                "rules": [
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                        "conditions": [],
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                            "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}

                    },
                        "type": "endpoint"
                    }
                ]
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            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ]
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    {
        "conditions": [
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        {
          "fn": "booleanEquals",

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          "type": "tree",
          "rules": [
            {
              "conditions": [
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                  "fn": "booleanEquals",
                  "argv": [
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{
                      "fn": "getAttr",
                      "argv": [
                        {
                          "ref": "PartitionResult"
                        },
                        "supportsFIPS"
                      ]
                    }
                  ]
                }
              ],
              "type": "tree",
              "rules": [

{
                  "conditions": [],
                  "endpoint": {
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                    "properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }
              ]
            },
            {
              "conditions": [],
```

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                "error": "FIPS is enabled but this
partition does not support FIPS",
                "type": "error"
              }
            ]
          },
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
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                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "type": "tree",
             "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },

    "supportsDualStack"
                          ]
                        }
                      ]
                    }
                  ],
                  "type": "tree",
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {
                        "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
```

```
                    },
                        "type": "endpoint"
                    }
                  ]
                },
                {
                  "conditions": [],
                  "error": "DualStack is enabled but this partition does not support DualStack",
                  "type": "error"
                }
              ]
            },
            {
              "conditions": [],
              "endpoint": {
                "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                 "properties": {},
                "headers": {}
              },
              "type": "endpoint"
            }
          ]
        }
      ]
    },
    {
      "conditions": [],
      "error": "Invalid Configuration: Missing Region",
      "type": "error"
    }
  ]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager.af-south-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "af-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
```

```
},
{
  "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-east-1",
    "UseFIPS": false,
    "UseDualStack": false
   }
},
{
  "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-2.amazonaws.com"
     }
  },
  "params": {
    "Region": "ap-northeast-2",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-3.amazonaws.com"
    }
  },
  "params": {
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```
            "Region": "ap-northeast-3",
            "UseFIPS": false,
            "UseDualStack": false
          }

    },
        {
          "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-south-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-1.amazonaws.com"

    }
          },
          "params": {
            "Region": "ap-southeast-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-southeast-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
```

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        "documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.ap-southeast-3.amazonaws.com"
              }
            },
            "params": {
              "Region": "ap-southeast-3",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.ca-central-1.amazonaws.com"
              }
            },

           "params": {
              "Region": "ca-central-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.eu-central-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "eu-central-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.eu-north-1.amazonaws.com"
              }
            },
            "params": {
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            "Region": "eu-north-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-south-1.amazonaws.com"
            }
          },
          "params": {
            "Region":
"eu-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-west-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
          "expect": {

          "endpoint": {
              "url": "https://license-manager.eu-west-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
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        "endpoint": {
          "url": "https://license-manager.eu-west-3.amazonaws.com"
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      "params": {
        "Region": "eu-west-3",
        "UseFIPS": false,

"UseDualStack": false
      }
    },
    {
      "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.me-south-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "me-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.sa-east-1.amazonaws.com"
         }
      },
      "params": {
        "Region": "sa-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
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```
            "UseDualStack": false
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  },
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-fips.us-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.us-east-2.amazonaws.com"
              }

           },
            "params": {
              "Region": "us-east-2",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-fips.us-east-2.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-2",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
            "expect": {
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```
            "endpoint": {
              "url": "https://license-manager.us-west-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-west-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-west-1.amazonaws.com"
            }
          },
          "params": {

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            "UseFIPS": true,
            "UseDualStack": false
          }
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        {
          "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-west-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-west-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

  "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-west-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-west-2",
            "UseFIPS": true,
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```
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,

            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
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```
                "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-northwest-1",
              "UseFIPS": false,
              "UseDualStack": false

    }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
             }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
```

```
        },

    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
        }
       },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-west-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-west-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
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"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
        }
```

```
      },
      "params": {
        "Region": "us-gov-west-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-gov-east-1.api.aws"
        }
      },

  "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
```

```
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled
but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
```

```
    },

    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
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      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
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      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },

  "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
```

```
                "UseFIPS": false,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
              "expect": {
                "endpoint": {
                  "url": "https://example.com"
                }
              },
              "params": {
                "UseFIPS": false,

        "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips enabled and dualstack disabled",
              "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips disabled and dualstack enabled",
              "expect": {
                "error":
 "Invalid Configuration: Dualstack and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "Missing region",
              "expect": {
```

```
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
  },
  "com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
    "output": {
      "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"

  }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
    }
  },
  "com.amazonaws.licensemanager#AcceptGrantRequest": {
    "type": "structure",
    "members": {
```

```
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant
ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#AccessDeniedException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
```

```
"code": "ServiceAccessDenied",
            "httpResponseCode": 401
          },
          "smithy.api#documentation": "<p>Access to resource denied.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 401
        }
    },
    "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
      "type": "enum",
      "members": {
        "DISTRIBUTED_GRANTS_ONLY": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
          }
        },
        "ALL_GRANTS_PERMITTED_BY_ISSUER": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#AllowedOperation": {

    "type": "enum",
      "members": {
        "CREATE_GRANT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "CreateGrant"
          }
        },
        "CHECKOUT_LICENSE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "CheckoutLicense"
          }
        },
        "CHECKOUT_BORROW_LICENSE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "CheckoutBorrowLicense"
          }
        },
```

```
            "CHECK_IN_LICENSE": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "CheckInLicense"
              }
            },
            "EXTEND_CONSUMPTION_LICENSE":
{
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "ExtendConsumptionLicense"
              }
            },
            "LIST_PURCHASED_LICENSES": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "ListPurchasedLicenses"
              }
            },
            "CREATE_TOKEN": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "CreateToken"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#AllowedOperationList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#AllowedOperation"
          },
          "traits": {
            "smithy.api#length": {
              "min": 1,
              "max":
7
            }
          }
        },
        "com.amazonaws.licensemanager#Arn": {
          "type": "string",
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 2048
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
```

```
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
      },
      "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Arn"
        }
      },
      "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError":
{
            "code": "AuthorizationFailure",
            "httpResponseCode": 403
          },
          "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n        policy associated with this account.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 403
        }
      },
      "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
          "LastRunTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
      },

    "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
          "smithy.api#default": false
        }
```

```
    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
      "type": "structure",
      "members": {
        "AllowEarlyCheckIn": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxTimeToLiveInMinutes": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
            "smithy.api#required": {}
          }
        }

},
      "traits": {
        "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
      }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
      "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
        },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
```

```
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
          },
          {
            "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
          },
          {
```

```
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
      },
      "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
{
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
              "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
              "smithy.api#required": {}
            }
          },
          "DigitalSignatureMethod": {
            "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
            "traits": {
              "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
              "smithy.api#required": {}
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
          },
          "CheckoutMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Information about constraints.</p>"
            }
          },
          "ClientToken": {
```

```
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License consumption token.</p>"
            }
          },
          "EntitlementsAllowed":
{
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
          },
          "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
              "smithy.api#documentation": "<p>Signed token.</p>"
            }
          },
          "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
            }
          },
          "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
            }
          },
          "CheckoutMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Information about constraints.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
               "target":
 "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n         <note>\n            <p>If the
 account that created the license is the same that is performing the check out, you must\n            specify the account
 as the beneficiary.</p>\n         </note>"
         }
      },
      "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
         "type": "structure",
         "members": {
            "ProductSKU": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Product
 SKU.</p>",
                  "smithy.api#required": {}
               }
            },
            "CheckoutType": {
               "target": "com.amazonaws.licensemanager#CheckoutType",
               "traits": {
                  "smithy.api#documentation": "<p>Checkout type.</p>",
                  "smithy.api#required": {}
               }
            },
            "KeyFingerprint": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                  "smithy.api#required": {}
               }
            },
            "Entitlements": {
               "target": "com.amazonaws.licensemanager#EntitlementDataList",
```

```
            "traits": {
              "smithy.api#documentation": "<p>License entitlements.</p>",

    "smithy.api#required": {}
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          },
          "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License beneficiary.</p>"
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
          }
        },
        "traits": {

       "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutLicenseResponse": {
        "type": "structure",
        "members": {
          "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
              "smithy.api#documentation": "<p>Checkout type.</p>"
            }
          },
          "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License consumption token.</p>"
            }
          },
          "EntitlementsAllowed": {
```

```
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
          },
          "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
              "smithy.api#documentation": "<p>Signed token.</p>"
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
          },
          "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
          },
          "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
            }
          },
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutType": {
        "type": "enum",
        "members": {
          "PROVISIONAL": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PROVISIONAL"
```

```
            }
          },
          "PERPETUAL": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PERPETUAL"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ClientRequestToken": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 36
          }
        }
      },
      "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 2048
          },
          "smithy.api#pattern": "^\\S+$"
        }
      },
      "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "ConflictException",
            "httpResponseCode":
409
          },
          "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 409
        }
      },
```

```
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
      "type": "structure",
      "members": {
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
          }
        },
        "ConsumedLicenses": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
          }
        }
      },

"traits": {
        "smithy.api#documentation": "<p>Details about license consumption.</p>"
      }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
      }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
      "type": "structure",
      "members": {
        "RenewType": {
          "target": "com.amazonaws.licensemanager#RenewType",
          "traits": {
            "smithy.api#documentation": "<p>Renewal frequency.</p>"
          }
        },
        "ProvisionalConfiguration": {
          "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
           }
        },
        "BorrowConfiguration": {
          "target": "com.amazonaws.licensemanager#BorrowConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
          }
        }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
 license\n            entitlements with a specific Amazon Web Services account, an organization, or an\n
 organizational unit (OU). For more
  information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
 licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
```

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            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientToken",
              "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            },
            "GrantName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Grant name.</p>",
                "smithy.api#required": {}

    }
            },
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
              }
            },
            "Principals": {
              "target": "com.amazonaws.licensemanager#PrincipalArnList",
              "traits": {
                "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an
Amazon Resource Name\n        (ARN):</p>\n        <ul>\n        <li>\n        <p>An Amazon Web Services
account, which includes only the account specified.</p>\n        </li>\n        </ul>\n        <ul>\n        <li>\n
    <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n        </li>\n        </ul>\n
<ul>\n
        <li>\n        <p>An organization, which will include all accounts across your organization.</p>\n
</li>\n        </ul>",
                "smithy.api#required": {}
              }
            },
            "HomeRegion": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowedOperations": {
              "target": "com.amazonaws.licensemanager#AllowedOperationList",
              "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                "smithy.api#required": {}
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },

    "com.amazonaws.licensemanager#CreateGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
     "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
```

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                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",

  "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>"
                }
```

```
        },
        "AllowedOperations": {
          "target": "com.amazonaws.licensemanager#AllowedOperationList",
          "traits": {
            "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "StatusReason": {
          "target": "com.amazonaws.licensemanager#StatusReasonMessage",
          "traits": {
            "smithy.api#documentation": "<p>Grant status reason.</p>"
          }
        },
        "SourceVersion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Current version of the grant.</p>"
          }
        },
        "Options": {
          "target": "com.amazonaws.licensemanager#Options",
          "traits": {
            "smithy.api#documentation": "<p>The options specified for the grant.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
```

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                "smithy.api#documentation": "<p>Grant status.</p>"
              }
            },
            "Version": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
              }
            }
          },
          "traits":
{
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#CreateLicense": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#RedirectException"
             },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
```

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        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a license configuration.</p>\n          <p>A license configuration is an abstraction of a customer license agreement that can be\n          consumed and enforced by License Manager. Components include specifications for the license\n          type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n          Dedicated Instance, Dedicated Host, or all of these), license affinity  to host (how long a \n          license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>",
              "smithy.api#required": {}
            }
```

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            },
            "Description": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Description of the license configuration.</p>"
               }
            },
            "LicenseCountingType": {
               "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                  "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                  "smithy.api#required": {}
               }
            },
            "LicenseCount": {
               "target": "com.amazonaws.licensemanager#BoxLong",
               "traits": {
                  "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
               }
            },
            "LicenseCountHardLimit": {
               "target": "com.amazonaws.licensemanager#BoxBoolean",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n         blocks the launch of new instances.</p>"
               }
            },
            "LicenseRules": {
               "target":
 "com.amazonaws.licensemanager#StringList",
               "traits": {
                  "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n         vary by dimension, as follows.</p>\n
<ul>\n            <li>\n               <p>\n                  <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
          <code>licenseAffinityToHost</code> |\n               <code>maximumCores</code> |
<code>minimumCores</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n               <code>maximumCores</code> |
<code>minimumCores</code> |\n               <code>maximumSockets</code> | <code>minimumSockets</code> |\n
          <code>maximumVcpus</code> | <code>minimumVcpus</code>\n               </p>\n            </li>\n
<li>\n
  <p>\n                  <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n               <code>maximumSockets</code> |
<code>minimumSockets</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n               <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n               </p>\n            </li>\n         </ul>\n         <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n         values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
```

<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
                }
            },

  "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": " Tags to add to the license configuration. "
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
                }
            },
            "ProductInformationList": {
                "target": "com.amazonaws.licensemanager#ProductInformationList",
                "traits": {
                    "smithy.api#documentation": " Product information. "
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"

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        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                 }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n         For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
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            }
          },
          "DestinationLicenseContext":
{
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

         "traits": {
              "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
```

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            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
         }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
         "type": "structure",
         "members": {
            "ReportGeneratorName":
{
               "target": "com.amazonaws.licensemanager#ReportGeneratorName",
               "traits": {
                  "smithy.api#documentation": "<p>Name of the report generator.</p>",
                  "smithy.api#required": {}
               }
            },
            "Type": {
               "target": "com.amazonaws.licensemanager#ReportTypeList",
               "traits": {
                  "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be generated:</p>\n <ul>\n <li>\n <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n </li>\n <li>\n <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n </li>\n </ul>",
                  "smithy.api#required": {}

         }
            },
            "ReportContext": {
               "target": "com.amazonaws.licensemanager#ReportContext",
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            "traits": {
              "smithy.api#documentation": "<p>Defines the type of license configuration the report generator tracks.</p>",
              "smithy.api#required": {}
            }
          },
          "ReportFrequency": {
            "target": "com.amazonaws.licensemanager#ReportFrequency",
            "traits": {
              "smithy.api#documentation": "<p>Frequency by which reports are generated.  Reports can be generated daily, monthly, or weekly.</p>",
              "smithy.api#required": {}
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientRequestToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
          "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report generator.</p>"
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            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product
name.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product SKU.</p>",
              "smithy.api#required": {}
            }
          },
          "Issuer": {
            "target": "com.amazonaws.licensemanager#Issuer",
            "traits": {
              "smithy.api#documentation": "<p>License issuer.</p>",
              "smithy.api#required": {}
            }
          },
          "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Home Region for the license.</p>",
              "smithy.api#required": {}

  }
          },
          "Validity": {
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            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
              "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-UTC format.</p>",
              "smithy.api#required": {}
            }
          },
          "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
              "smithy.api#documentation": "<p>License entitlements.</p>",
              "smithy.api#required": {}
            }
          },
          "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License beneficiary.</p>",
              "smithy.api#required": {}
            }
          },
          "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license.</p>"
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
```

```
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
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            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits":
{
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
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            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n        running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n        usage.</p>",
                "smithy.api#required": {}
            }
        },

    "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>",
                "smithy.api#required": {}
            }
        },
        "ClientToken": {
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            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          },
          "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the license.</p>"
            }
          }
        },
        "traits": {

 "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>License ARN.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>New version of the license.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
{}
        }
      },
      "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
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      "input": {
        "target": "com.amazonaws.licensemanager#CreateTokenRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateTokenResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },

    {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT token used to get an access token. With an access token,\n        you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n        call License Manager to manage the specified license.</p>"
      }
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits":
{
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n        JWT token.</p>",
```

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                "smithy.api#required": {}
            }
        },
        "RoleArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n        License Manager does not check whether the roles are in use.</p>"
            }
        },
        "ExpirationInDays": {
            "target": "com.amazonaws.licensemanager#Integer",
            "traits": {
                "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The default is 365 days.</p>"
            }
        },
        "TokenProperties": {
            "target": "com.amazonaws.licensemanager#MaxSize3StringList",
            "traits": {
                "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The data is mapped\n        to the amr claim of the JWT token.</p>"
            }
        },
        "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
                "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",

            "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
            }
        },
        "TokenType": {
            "target": "com.amazonaws.licensemanager#TokenType",
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            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
```

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            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
          }
        },
        "com.amazonaws.licensemanager#DeleteGrantRequest": {
          "type": "structure",
          "members": {
            "GrantArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
              }
            },
            "StatusReason": {
              "target": "com.amazonaws.licensemanager#StatusReasonMessage",
              "traits": {
                "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
              }
            },
            "Version": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Current version of the
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grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
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            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },

    "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n         <p>You cannot delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members":
{
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
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            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
             }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n          <p>This action deletes the report generator, which stops it from generating future reports.\n          The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
          }
        },
        "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
          "type": "structure",
          "members": {
            "LicenseManagerReportGeneratorArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {

  "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
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    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "SourceVersion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Current version of the license.</p>",
            "smithy.api#required":
{}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
      "type": "structure",
      "members": {
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
          "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
          }
        },
        "DeletionDate": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteToken": {
      "type": "operation",
       "input": {
        "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
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        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },

    {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
      },
      "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
          "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token ID.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
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    "com.amazonaws.licensemanager#DeleteTokenResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}

      }
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
      "type": "enum",
      "members": {
        "JWT_PS384": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "JWT_PS384"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#Entitlement": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Entitlement name.</p>",
            "smithy.api#required": {}
          }
        },
        "Value": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
          }
        },
        "MaxCount": {
          "target": "com.amazonaws.licensemanager#Long",
          "traits": {
            "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
          }
        },
        "Overage": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
          }
        },
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            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement unit.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowCheckIn": {
                "target":
"com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementData": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement
data value.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
        }
    },
```

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    "com.amazonaws.licensemanager#EntitlementDataList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#EntitlementData"
      }
    },
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
      "type": "enum",
      "members": {
        "COUNT": {
          "target": "smithy.api#Unit",
          "traits": {

"smithy.api#enumValue": "Count"
          }
        },
        "NONE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "None"
          }
        },
        "SECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Seconds"
          }
        },
        "MICROSECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Microseconds"
          }
        },
        "MILLISECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Milliseconds"
          }
        },
        "BYTES": {
          "target": "smithy.api#Unit",
           "traits": {
            "smithy.api#enumValue": "Bytes"
          }
        },
        "KILOBYTES": {
          "target": "smithy.api#Unit",
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            "traits": {
              "smithy.api#enumValue": "Kilobytes"
            }
          },
          "MEGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Megabytes"
            }
          },
          "GIGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Gigabytes"
            }
          },
          "TERABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Terabytes"
            }
          },
          "BITS":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Bits"
            }
          },
          "KILOBITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Kilobits"
            }
          },
          "MEGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Megabits"
            }
          },
          "GIGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Gigabits"
            }
          },
          "TERABITS": {
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            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits"

    }
        },
        "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Percent"
            }
        },
        "BYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes/Second"
            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
        "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes/Second"
            }
        },
        "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits/Second"
            }
        },
```

```
            "KILOBITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
              }
            },
            "MEGABITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue":
"Megabits/Second"
              }
            },
            "GIGABITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
              }
            },
            "TERABITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Terabits/Second"
              }
            },
            "COUNT_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Count/Second"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#EntitlementList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#Entitlement"
          }
        },
        "com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
          "type": "structure",
          "members": {
            "Message": {
              "target": "com.amazonaws.licensemanager#Message"
            }
          },
          "traits": {
```

```
            "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
          }
        },
        "com.amazonaws.licensemanager#EntitlementUnit": {
          "type": "enum",
          "members": {
            "COUNT": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Count"
              }
            },
            "NONE": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "None"
              }
            },
            "SECONDS":
{
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Seconds"
              }
            },
            "MICROSECONDS": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Microseconds"
              }
            },
            "MILLISECONDS": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Milliseconds"
              }
            },
            "BYTES": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Bytes"
              }
            },
            "KILOBYTES": {
              "target": "smithy.api#Unit",
              "traits": {
```

```
        "smithy.api#enumValue": "Kilobytes"
      }
    },
    "MEGABYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Megabytes"
      }
    },
    "GIGABYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Gigabytes"
      }
    },
    "TERABYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Terabytes"
      }
    },
    "BITS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Bits"
      }
    },
    "KILOBITS": {
      "target": "smithy.api#Unit",
      "traits": {

       "smithy.api#enumValue": "Kilobits"
      }
    },
    "MEGABITS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Megabits"
      }
    },
    "GIGABITS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Gigabits"
      }
    },
    "TERABITS": {
      "target": "smithy.api#Unit",
```

```
            "traits": {
              "smithy.api#enumValue": "Terabits"
            }
          },
          "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Percent"
            }
          },
          "BYTES_PER_SECOND": {
            "target":
"smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Bytes/Second"
            }
          },
          "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Kilobytes/Second"
            }
          },
          "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Megabytes/Second"
            }
          },
          "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Gigabytes/Second"
            }
          },
          "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {

"smithy.api#enumValue": "Terabytes/Second"
            }
          },
          "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Bits/Second"
            }
          },
```

```
      "KILOBITS_PER_SECOND": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Kilobits/Second"
        }
      },
      "MEGABITS_PER_SECOND": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Megabits/Second"
        }
      },
      "GIGABITS_PER_SECOND": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Gigabits/Second"
        }
      },

  "TERABITS_PER_SECOND": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Terabits/Second"
        }
      },
      "COUNT_PER_SECOND": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Count/Second"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Entitlement usage name.</p>",
          "smithy.api#required": {}
        }
      },
      "ConsumedValue": {
        "target": "com.amazonaws.licensemanager#String",

      "traits": {
          "smithy.api#documentation": "<p>Resource usage consumed.</p>",
```

```
                "smithy.api#required": {}
              }
            },
            "MaxCount": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
              }
            },
            "Unit": {
              "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
          }
        },
        "com.amazonaws.licensemanager#EntitlementUsageList":
{
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
          }
        },
        "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
      }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
      "type": "structure",
      "members": {
        "LicenseConsumptionToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License consumption token.</p>",
            "smithy.api#required": {}

    }
        },
        "DryRun": {
          "target": "com.amazonaws.licensemanager#Boolean",
          "traits": {
            "smithy.api#default": false,
            "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
      "type": "structure",
      "members": {
        "LicenseConsumptionToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License consumption token.</p>"
          }
        },
```

```
            "Expiration": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#FailedDependencyException": {
          "type": "structure",
          "members": {
            "Message": {
              "target": "com.amazonaws.licensemanager#Message"
            },
            "ErrorCode": {
              "target": "com.amazonaws.licensemanager#String"
            }
          },
          "traits": {
            "aws.protocols#awsQueryError": {
              "code": "FailedDependency",
              "httpResponseCode": 424
            },
            "smithy.api#documentation":
"<p>A dependency required to run the API is missing.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 424
          }
        },
        "com.amazonaws.licensemanager#Filter": {
          "type": "structure",
          "members": {
            "Name": {
              "target": "com.amazonaws.licensemanager#FilterName",
              "traits": {
                "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
              }
            },
            "Values": {
              "target": "com.amazonaws.licensemanager#FilterValues",
              "traits": {
                "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only
specify one value for the filter.</p>"
              }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter
 name and value pair that is used to return more specific results from a\n          describe operation. Filters can be used
to match a set of resources by specific criteria,\n          such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanager#FilterLimitExceededException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FilterLimitExceeded",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#FilterList": {
        "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#Filter"
        }
    },
    "com.amazonaws.licensemanager#FilterName": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValue": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValues": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#FilterValue",
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#Filters": {
        "type": "list",
```

```
        "member": {
          "target": "com.amazonaws.licensemanager#Filter",
          "traits": {
            "smithy.api#xmlName": "item"
          }
        }
      },
      "com.amazonaws.licensemanager#GetAccessToken": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n        are valid for one hour.</p>"
        }
      },
      "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
          "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
              "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
              "smithy.api#required": {}
            }
          },
```

```
        "TokenProperties": {
          "target": "com.amazonaws.licensemanager#MaxSize3StringList",
          "traits": {
            "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT token.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse": {
      "type": "structure",
      "members": {
        "AccessToken": {
          "target": "com.amazonaws.licensemanager#TokenString",
          "traits": {
            "smithy.api#documentation": "<p>Temporary access token.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetGrant": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetGrantRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"

      },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {
```

```
"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"

 },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
{
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
```

```
    }
  },
  "Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Name of the license configuration.</p>"
     }
  },
  "Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
  },
  "LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
      "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
  },
  "LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
      "smithy.api#documentation": "<p>License rules.</p>"
    }
  },
  "LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

   "traits": {
      "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
  },
  "LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
  },
  "ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
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```
                "smithy.api#documentation": "<p>License configuration status.</p>"
              }

        },
          "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
            }
          },
          "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
            }
          },
          "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
             "traits": {
              "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>Product information.</p>"
            }
          },
          "AutomatedDiscoveryInformation": {
            "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
            "traits": {
              "smithy.api#documentation": "<p>Automated discovery information.</p>"
            }
          },
          "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
            }
          }
        },
```

```
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTask": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {

 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information
on.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
            }
          },
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
            }
          },
          "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information
 about the license type converted from.</p>"
            }
          },
          "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
              "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
          },

    "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
```

```
            }
          },
          "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
          },
          "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

        },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
```

```
            "traits": {

"smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
          "License": {
            "target": "com.amazonaws.licensemanager#License",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },

    "com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
```

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                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

  "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
        "type": "structure",
        "members": {
            "LicenseUsage": {
                "target":
"com.amazonaws.licensemanager#LicenseUsage",
                "traits": {
                    "smithy.api#documentation": "<p>License usage details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
```

```
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
           },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
      },
      "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "S3BucketArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n        and so on.</p>"

  }
          },
          "SnsTopicArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
```

```
            }
          },
          "OrganizationConfiguration": {
            "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
            }
          },
          "EnableCrossAccountsDiscovery": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
            }

        },
          "LicenseManagerResourceShareArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#Grant": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          },
          "GrantName": {

 "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant name.</p>",
              "smithy.api#required": {}
            }
          },
          "ParentArn": {
            "target": "com.amazonaws.licensemanager#Arn",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Parent ARN.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>License ARN.</p>",
                "smithy.api#required": {}
            }
        },
        "GranteePrincipalArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {

"smithy.api#documentation": "<p>The grantee principal ARN.</p>",
                "smithy.api#required": {}
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "GrantStatus": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>",
                "smithy.api#required": {}
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
             }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>",
                "smithy.api#required": {}
            }
        },
        "GrantedOperations": {
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            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
              "smithy.api#documentation": "<p>Granted operations.</p>",
              "smithy.api#required": {}
            }
          },
          "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
              "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
"<p>Describes a grant.</p>"
        }
      },
      "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Grant"
        }
      },
      "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
          "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
          },
          "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_ACCEPT"
            }
          },
          "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "REJECTED"

            }
          },
          "ACTIVE": {
            "target": "smithy.api#Unit",
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            "traits": {
              "smithy.api#enumValue": "ACTIVE"
            }
          },
          "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
          },
          "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
          },
          "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_DELETE"
            }
          },
          "DISABLED": {
            "target": "smithy.api#Unit",
            "traits":
{
              "smithy.api#enumValue": "DISABLED"
            }
          },
          "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
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            "traits": {
                "smithy.api#documentation": "<p>License name.</p>"
            }

    },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>Granted license issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>Granted license status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
            }
```

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        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
           "traits": {
             "smithy.api#documentation": "<p>License entitlements.</p>"
          }
        },
        "ConsumptionConfiguration": {
          "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
          "traits": {
             "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
          }
        },
        "LicenseMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
             "smithy.api#documentation": "<p>Granted license metadata.</p>"
          }
        },
        "CreateTime": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
             "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

}
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
             "smithy.api#documentation": "<p>Version of the granted license.</p>"
          }
        },
        "ReceivedMetadata": {
          "target": "com.amazonaws.licensemanager#ReceivedMetadata",
          "traits": {
             "smithy.api#documentation": "<p>Granted license received metadata.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
      }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#GrantedLicense"
      }
```

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    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
"<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n         <p>For example, you cannot allocate a license to an instance in the process of shutting\n
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down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
      },

     "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the filter.</p>",
              "smithy.api#required": {}
            }
          },
          "Condition": {
            "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
            "traits": {
              "smithy.api#documentation": "<p>Condition of the filter.</p>",
              "smithy.api#required": {}
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
          }

    },
        "traits": {
          "smithy.api#documentation": "<p>An inventory filter.</p>"
        }
      },
     "com.amazonaws.licensemanager#InventoryFilterCondition": {
        "type": "enum",
        "members": {
          "EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "EQUALS"
            }
          },
          "NOT_EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "NOT_EQUALS"
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            }
          },
          "BEGINS_WITH": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "BEGINS_WITH"
            }
          },
          "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
               "smithy.api#enumValue": "CONTAINS"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
      },
      "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Issuer name.</p>",
              "smithy.api#required": {}
            }
          },
          "SignKey": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage
 of sign and verify, \n         and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
      },
      "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
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```
            "Name": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Issuer name.</p>"
              }
            },
            "SignKey": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
              }
            },
            "KeyFingerprint": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
          }
        },
        "com.amazonaws.licensemanager#License": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
              }
            },
            "LicenseName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {

             "smithy.api#documentation": "<p>License name.</p>"
              }
            },
            "ProductName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
              }
            },
            "ProductSKU": {
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```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product SKU.</p>"
            }
          },
          "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
              "smithy.api#documentation": "<p>License issuer.</p>"
            }
          },
          "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

          "smithy.api#documentation": "<p>Home Region of the license.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          },
          "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
              "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
            }
          },
          "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License beneficiary.</p>"
            }
          },
          "Entitlements": {

   "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
              "smithy.api#documentation": "<p>License entitlements.</p>"
            }
          },
          "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
```

```
            }
          },
          "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>License metadata.</p>"
            }
          },
          "CreateTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>License
creation time.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
          "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
            }
          },
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          },
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
          },
          "Description": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
          },
          "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
              "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
             }
          },
          "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
              "smithy.api#documentation": "<p>License rules.</p>"
            }
          },
          "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
          },
          "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
          },
          "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
             "traits": {
              "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
          },
          "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Status of the license configuration.</p>"
            }
          },
```

```
        "OwnerAccountId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

        }
        },
        "ConsumedLicenseSummaryList": {
          "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
          }
        },
        "ManagedResourceSummaryList": {
          "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
          }
        },
        "ProductInformationList": {
          "target": "com.amazonaws.licensemanager#ProductInformationList",
          "traits": {
            "smithy.api#documentation": "<p>Product information.</p>"
          }
        },
        "AutomatedDiscoveryInformation": {

          "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
          "traits": {
            "smithy.api#documentation": "<p>Automated discovery information.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n        must be associated with a host), and the number of licenses purchased and used.</p>"
      }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
      "type": "structure",
      "members": {
        "ResourceArn":
{
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
```

```
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
              }
            },
            "ResourceType": {
              "target": "com.amazonaws.licensemanager#ResourceType",
              "traits": {
                "smithy.api#documentation": "<p>Type of server resource.</p>"
              }
            },
            "ResourceOwnerId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource consuming licenses.</p>"
              }
            },
            "AssociationTime": {
              "target": "com.amazonaws.licensemanager#DateTime",
              "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
              }
            },
            "AmiAssociationScope": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
          }
        },
        "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
          }
        },
        "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
          "type": "enum",
          "members":
 {
            "AVAILABLE": {
              "target": "smithy.api#Unit",
              "traits": {
```

```
                "smithy.api#enumValue": "AVAILABLE"
              }
            },
            "DISABLED": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "DISABLED"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
              }
            },
            "ResourceType": {
              "target": "com.amazonaws.licensemanager#ResourceType",
              "traits":
{
                "smithy.api#documentation": "<p>Type of resource.</p>"
              }
            },
            "ResourceStatus": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Status of the resource.</p>"
              }
            },
            "ResourceOwnerId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
              }
            },
            "AssociationTime": {
              "target": "com.amazonaws.licensemanager#DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
              }
            },
```

```
    "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurations": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConfiguration"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionContext": {

    "type": "structure",
        "members": {
          "UsageOperation": {
            "target": "com.amazonaws.licensemanager#UsageOperation",
            "traits": {
              "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you are converting your resource from.  For more information about which platforms correspond to which usage operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n        </p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
```

```
        "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n         conversion task.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
                }
            },
            "DestinationLicenseContext": {
                "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the conversion task.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
                }
            },
            "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The time the usage operation value of the resource was changed.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
    "type": "string",
    "traits": {

   "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
    "type": "enum",
    "members": {
        "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "IN_PROGRESS"
            }
        },
        "SUCCEEDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUCCEEDED"
            }
        },
        "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED"
            }
        }
```

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
            "VCPU": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "vCPU"
                }
            },
            "INSTANCE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Instance"
                }
            },
            "CORE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Core"
                }
            },
            "SOCKET": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Socket"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseDeletionStatus": {
        "type": "enum",
        "members": {
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DELETED": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#License"
        }
      },
      "com.amazonaws.licensemanager#LicenseOperationFailure": {

        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Resource type.</p>"
            }
          },
          "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Error message.</p>"
            }
          },
          "FailureTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {

      "smithy.api#documentation": "<p>Failure time.</p>"
            }
          },
          "OperationName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the operation.</p>"
            }
          },
```

```
            "ResourceOwnerId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
              }
            },
            "OperationRequestedBy": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
              }
            },
            "MetadataList": {

              "target": "com.amazonaws.licensemanager#MetadataList",
              "traits": {
                "smithy.api#documentation": "<p>Reserved.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
          }
        },
        "com.amazonaws.licensemanager#LicenseOperationFailureList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
          }
        },
        "com.amazonaws.licensemanager#LicenseSpecification": {
          "type": "structure",
          "members": {
            "LicenseConfigurationArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

                "smithy.api#required": {}
              }
            },
            "AmiAssociationScope": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
```

```
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
    }
  },
  "com.amazonaws.licensemanager#LicenseSpecifications": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#LicenseSpecification"
    }
  },
  "com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
      "AVAILABLE": {
        "target": "smithy.api#Unit",

      "traits": {
          "smithy.api#enumValue": "AVAILABLE"
        }
      },
      "PENDING_AVAILABLE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PENDING_AVAILABLE"
        }
      },
      "DEACTIVATED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "DEACTIVATED"
        }
      },
      "SUSPENDED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "SUSPENDED"
        }
      },
      "EXPIRED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EXPIRED"
        }
      },
```

```
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_DELETE"
            }
          },
          "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseUsage": {
        "type": "structure",
        "members": {
          "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
            "traits": {
              "smithy.api#documentation": "<p>License entitlement usages.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

        }
      },
      "com.amazonaws.licensemanager#LicenseUsageException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "LicenseUsageFailure",
            "httpResponseCode": 412
          },
          "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 412
        }
      },
      "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
```

```
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {

    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n         <p>Resource associations need not consume licenses from a license
configuration. \n         For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
```

```
                "smithy.api#documentation": "<p>Maximum number of results
to return in a single call.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
          "type": "structure",
          "members": {
            "LicenseConfigurationAssociations": {
              "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
              "traits": {
                "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
              }
            },
            "NextToken": {

 "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#ListDistributedGrants": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
          "type": "structure",
          "members": {
            "GrantArns": {
              "target": "com.amazonaws.licensemanager#ArnList",
              "traits": {

            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n
  <li>\n            <p>\n              <code>GranteePrincipalARN</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>LicenseIssuerName</code>\n
        </p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",

"traits": {
                "smithy.api#documentation": "<p>Distributed grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
    },
    "errors": [
        {
```

```
"target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
         }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
         "type": "structure",
         "members": {
            "LicenseConfigurationArn": {
               "target": "com.amazonaws.licensemanager#String",
                "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
                  "smithy.api#required": {}
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanager#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
               }
            },
            "NextToken": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
```

```
{
        "type": "structure",
        "members": {
          "LicenseOperationFailureList": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
            "traits": {
              "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
    "type": "structure",
    "members": {
      "LicenseConfigurations": {
        "target": "com.amazonaws.licensemanager#LicenseConfigurations",
        "traits": {
          "smithy.api#documentation": "<p>Information about the license configurations.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",

     "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
       },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
```

```
      "traits": {
        "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
      "type": "structure",
      "members": {
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {

   "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#Filters",
          "traits": {
            "smithy.api#documentation": "<p>\n        Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
      "type": "structure",
      "members": {
        "LicenseConversionTasks": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
          "traits": {
            "smithy.api#documentation": "<p>Information about the license configuration tasks for your
 account.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
```

```
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target":
"com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
```

```
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n      <ul>\n        <li>\n          <p>\n            <code>LicenseConfigurationArn</code>\n
</p>\n        </li>\n      </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits":
 {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
      "type": "structure",
      "members": {
        "ReportGenerators": {
          "target": "com.amazonaws.licensemanager#ReportGeneratorList",
          "traits": {
            "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }

      }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
```

```
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {

        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "NextToken": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {
          "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
              "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
          },
          "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

```
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
      "type": "structure",
      "members": {
        "Licenses": {
          "target": "com.amazonaws.licensemanager#LicenseList",
          "traits": {
            "smithy.api#documentation": "<p>License details.</p>"
          }
        },
```

```
"NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
```

```
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
            }
          },

      "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n
   <li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>Status</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token
 for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
"smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while specifying the\n            recipient as this Amazon Web Services account, your organization, or an organizational unit\n            (OU) to which this member account belongs.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
        "type": "operation",
        "input": {
```

```
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                "smithy.api#required": {}
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
```

```
<ul>\n <li>\n <p>\n <code>ParentArn</code>\n </p>\n </li>\n
<li>\n <p>\n <code>GranteePrincipalArn</code>\n </p>\n </li>\n </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
              "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
          "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>LicenseIssuerName</code>\n            </p>\n
</li>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n          <li>\n
<p>\n
        <code>GranterAccountId</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
              "smithy.api#documentation": "<p>Received grant details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
```

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicenses": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {

      "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n
          </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
```

```
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
             "traits": {
              "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
        "type": "structure",
        "members": {
          "LicenseArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
            }
          },

           "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>Status</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>IssuerName</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
```

```
<code>Beneficiary</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
               "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
               "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
               "smithy.api#documentation": "<p>Received license details.</p>"
            }
          },

         "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
               "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventory": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
             "target": "com.amazonaws.licensemanager#FailedDependencyException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
             "traits": {
               "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#InventoryFilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n       are supported:</p>\n       <ul>\n       <li>\n       <p>\n       <code>account_id</code>
```

- The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n \n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n <code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
        "type": "structure",
        "members": {
          "ResourceInventoryList": {
            "target": "com.amazonaws.licensemanager#ResourceInventoryList",
            "traits": {
              "smithy.api#documentation": " Information
 about the resources. "
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": " Token for the next set of results. "
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },

```
        "output": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
          "TokenIds": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {

              "smithy.api#documentation": "<p>Token IDs.</p>"
            }
          },
          "Filters": {
```

```
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>LicenseArns</code>\n        </p>\n        </li>\n
</ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
          "Tokens": {
            "target": "com.amazonaws.licensemanager#TokenList",
            "traits": {
              "smithy.api#documentation": "<p>Received token details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n consumption details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
```

```
            },
            "NextToken": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanager#Filters",
               "traits": {
                  "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>resourceArn</code> - The ARN of the license configuration resource.\n
          Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n
 <li>\n                <p>\n                    <code>resourceType</code> - The resource type
(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
    <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators
are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
         "type": "structure",
         "members": {

 "LicenseConfigurationUsageList": {
               "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
               "traits": {
                  "smithy.api#documentation": "<p>Information about the license configurations.</p>"
               }
            },
            "NextToken": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
```

```
    "com.amazonaws.licensemanager#Location": {
      "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
      "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
      "type": "structure",
      "members": {
        "ResourceType":
{
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
          }
        },
        "AssociationCount": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
      }
    },
    "com.amazonaws.licensemanager#ManagedResourceSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
      }
    },
    "com.amazonaws.licensemanager#MaxSize100": {

    "type": "integer",
      "traits": {
        "smithy.api#range": {
          "min": 1,
          "max": 100
        }
      }
    },
    "com.amazonaws.licensemanager#MaxSize3StringList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#String"
      },
```

```
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 3
        }
      }
    },
    "com.amazonaws.licensemanager#Message": {
      "type": "string"
    },
    "com.amazonaws.licensemanager#Metadata": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>The key name.</p>"
          }
        },

    "Value": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>The value.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
      }
    },
    "com.amazonaws.licensemanager#MetadataList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#Metadata"
      }
    },
    "com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement
maximum count is reached.</p>",
```

```
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#Options": {
        "type": "structure",
        "members": {
            "ActivationOverrideBehavior": {
                "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
                "traits": {
                    "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of activating a grant.\n          Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter.</p>\n          <ul>\n             <li>\n                <p>As a license administrator, you can optionally specify an\n                   <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n             </li>\n             <li>\n                <p>As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n                   account in your organization.</p>\n             </li>\n             <li>\n                <p>As a grantee, if the grantor creating the distributed grant doesnt specify an\n                   <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n                   are activating the grant.</p>\n             </li>\n          </ul>\n          <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n             <dd>\n                <p>Use this value to activate a grant without replacing any member accounts\n                   active grants for the same product.</p>\n             </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n             <dd>\n                <p>Use this value to activate a grant and disable other active grants in any\n                   member accounts
 for the same product. This action will also replace their\n                   previously activated grants with this activated grant.</p>\n             </dd>\n          </dl>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant, such as activation\n          override behavior. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#OrganizationConfiguration": {
        "type": "structure",
        "members": {
            "EnableIntegration": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation":
 "<p>Enables Organizations integration.</p>",
                    "smithy.api#required": {}
                }
            }
```

```
        },
        "traits": {
          "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
      },
      "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 1
          }
        }
      },
      "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Resource type. The
 possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductInformationFilterList": {
            "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
            "traits": {
              "smithy.api#documentation": "<p>A Product information filter consists of a
 <code>ProductInformationFilterComparator</code> which is a logical operator, a
 <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
 <code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n          <p>Accepted values
 for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
 <code>ProductInformationFilterComparator</code>. </p>\n          <p>The following filters and are supported when
 the resource type \n          is <code>SSM_MANAGED</code>:</p>\n
          <ul>\n            <li>\n              <p>\n                <code>Application Name</code> - The name of the
 application.\n                Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
 <p>\n                <code>Application Publisher</code> - The publisher of the application.\n                Logical
 operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n              <p>\n
 <code>Application Version</code> - The version of the application.\n                Logical operator is
 <code>EQUALS</code>.</p>\n            </li>\n            <li>\n              <p>\n                <code>Platform
 Name</code> - The name of the platform.\n                Logical operator is <code>EQUALS</code>.</p>\n
 </li>\n            <li>\n              <p>\n                <code>Platform Type</code> - The platform type.\n
 Logical operator is <code>EQUALS</code>.</p>\n
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</li>\n <li>\n <p>\n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n </p>\n </li>\n <li>\n <p>\n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>.</p>\n </li>\n </ul>\n <p>The following filters and logical operators are supported when the resource type\n is <code>RDS</code>:</p>\n <ul>\n <li>\n <p>\n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>.</p>\n </li>\n <li>\n <p>\n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>.</p>\n </li>\n </ul>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

        "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
            "smithy.api#documentation": "<p>Logical operator.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
      }
    },
    "com.amazonaws.licensemanager#ProductInformationFilterList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
      }
    },
    "com.amazonaws.licensemanager#ProductInformationList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
       }
    },
    "com.amazonaws.licensemanager#ProvisionalConfiguration": {
      "type": "structure",
      "members": {
        "MaxTimeToLiveInMinutes": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
      }
    },
    "com.amazonaws.licensemanager#RateLimitExceededException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "RateLimitExceeded",
          "httpResponseCode": 429
        },
```

```
            "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 429
          }
        },
        "com.amazonaws.licensemanager#ReceivedMetadata": {
          "type": "structure",
          "members": {
            "ReceivedStatus": {
              "target": "com.amazonaws.licensemanager#ReceivedStatus",
              "traits": {
                "smithy.api#documentation": "<p>Received status.</p>"
              }
            },
            "ReceivedStatusReason": {
              "target": "com.amazonaws.licensemanager#StatusReasonMessage",
              "traits": {
                "smithy.api#documentation": "<p>Received
 status reason.</p>"
              }
            },
            "AllowedOperations": {
              "target": "com.amazonaws.licensemanager#AllowedOperationList",
              "traits": {
                "smithy.api#documentation": "<p>Allowed operations.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
          }
        },
        "com.amazonaws.licensemanager#ReceivedStatus": {
          "type": "enum",
          "members": {
            "PENDING_WORKFLOW": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "PENDING_WORKFLOW"
              }
            },
            "PENDING_ACCEPT": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue":
 "PENDING_ACCEPT"
              }
```

```
        },
        "REJECTED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "REJECTED"
          }
        },
        "ACTIVE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "ACTIVE"
          }
        },
        "FAILED_WORKFLOW": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "FAILED_WORKFLOW"
          }
        },
        "DELETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DELETED"
          }
        },
        "DISABLED": {
          "target": "smithy.api#Unit",
           "traits": {
            "smithy.api#enumValue": "DISABLED"
          }
        },
        "WORKFLOW_COMPLETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "WORKFLOW_COMPLETED"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#RedirectException": {
      "type": "structure",
      "members": {
        "Location": {
          "target": "com.amazonaws.licensemanager#Location",
          "traits": {
            "smithy.api#httpHeader": "Location"
          }
        },
```

```
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
             "smithy.api#error": "client",
            "smithy.api#httpError": 308
        }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
```

```
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#RenewType":
{
      "type": "enum",
      "members": {
        "NONE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "None"
```

```
            }
          },
          "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Weekly"
            }
          },
          "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Monthly"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ReportContext": {
        "type": "structure",
        "members": {
          "licenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {

        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this
generator reports on.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
        }
      },
      "com.amazonaws.licensemanager#ReportFrequency": {
        "type": "structure",
        "members": {
          "value": {
            "target": "com.amazonaws.licensemanager#Integer",
            "traits": {
              "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated.  \n        The only supported value is <code>1</code>.</p>"
            }
          },
          "period": {
            "target": "com.amazonaws.licensemanager#ReportFrequencyType",

           "traits": {
              "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
```

```
or monthly.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportFrequencyType": {
        "type": "enum",
        "members": {
            "DAY": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DAY"
                }
            },
            "WEEK": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WEEK"
                }
            },
            "MONTH": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "MONTH"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>"
                }
            },
            "ReportType": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
                }
            },
            "ReportContext": {
```

```
            "target": "com.amazonaws.licensemanager#ReportContext",
            "traits": {
              "smithy.api#documentation": "<p>License
 configuration type for this generator.</p>"
            }
          },
          "ReportFrequency": {
            "target": "com.amazonaws.licensemanager#ReportFrequency",
            "traits": {
              "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
            }
          },
          "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
            }
          },
          "LastRunStatus": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
            }
          },
          "LastRunFailureReason":
 {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
            }
          },
          "LastReportGenerationTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
            }
          },
          "ReportCreatorAccount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
 generator.</p>"
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
```

```
        "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
          },
          "S3Location": {
            "target": "com.amazonaws.licensemanager#S3Location",
            "traits": {
              "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
            }
          },
          "CreateTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Time the report was created.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
            }

      }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
        }
      },
      "com.amazonaws.licensemanager#ReportGeneratorList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#ReportGenerator"
        }
      },
      "com.amazonaws.licensemanager#ReportGeneratorName": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          }
        }
      },
      "com.amazonaws.licensemanager#ReportType": {
        "type": "enum",
        "members": {
          "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
            }

      },
          "LICENSE_CONFIGURATION_USAGE_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "LicenseConfigurationUsageReport"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ReportTypeList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#ReportType"
        }
      },
      "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
          "ResourceId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the resource.</p>"
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits":
{
              "smithy.api#documentation": "<p>Type of resource.</p>"
            }
          },
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
          },
          "Platform": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Platform of the resource.</p>"
            }
          },
```

```
            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventoryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ResourceInventory"
        }
    },
    "com.amazonaws.licensemanager#ResourceLimitExceededException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ResourceLimitExceeded",

                 "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
```

```
    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "InvalidResource.NotFound",
        "httpResponseCode": 400
      },
      "smithy.api#documentation": "<p>The resource cannot be found.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
    }
  },
  "com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
    "members": {
      "EC2_INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_INSTANCE"
        }
      },
      "EC2_HOST": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_HOST"
        }
      },
      "EC2_AMI": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_AMI"
        }
      },
      "RDS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "RDS"
        }
      },
      "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#S3Location": {
    "type": "structure",
```

```
      "members": {
        "bucket": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
          }
        },
        "keyPrefix": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
      }
    },
    "com.amazonaws.licensemanager#ServerInternalException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "InternalError",
          "httpResponseCode": 500
        },
        "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
        "smithy.api#error": "server",
        "smithy.api#httpError": 500
      }
    },
    "com.amazonaws.licensemanager#SignedToken": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 4096
        }
      }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
      "type": "string",
      "traits":
```

```
{
            "smithy.api#length": {
               "min": 0,
               "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
         }
      },
      "com.amazonaws.licensemanager#String": {
         "type": "string"
      },
      "com.amazonaws.licensemanager#StringList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#String"
         }
      },
      "com.amazonaws.licensemanager#Tag": {
         "type": "structure",
         "members": {
            "Key": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Tag key.</p>"
               }
            },
            "Value": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation":
"<p>Tag value.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
         }
      },
      "com.amazonaws.licensemanager#TagKeyList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#String"
         }
      },
      "com.amazonaws.licensemanager#TagList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#Tag"
```

```
        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
          {
            "target":
 "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits":
 {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>One or more tags.</p>",
```

```
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#TagResourceResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#TokenData": {
          "type": "structure",
          "members": {
            "TokenId": {
              "target": "com.amazonaws.licensemanager#String",
               "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
              }
            },
            "TokenType": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
              }
            },
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
              }
            },
            "ExpirationTime": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
 format.</p>"
              }
            },
            "TokenProperties": {
              "target": "com.amazonaws.licensemanager#MaxSize3StringList",
              "traits": {
                "smithy.api#documentation": "<p>Data specified by the caller.</p>"
```

```
            }
          },
          "RoleArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
            }
          }
        },
        "traits": {

          "smithy.api#documentation": "<p>Describes a token.</p>"
        }
      },
      "com.amazonaws.licensemanager#TokenList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#TokenData"
        }
      },
      "com.amazonaws.licensemanager#TokenString": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 4096
          },
          "smithy.api#pattern": "^\\S+$"
        }
      },
      "com.amazonaws.licensemanager#TokenType": {
        "type": "enum",
        "members": {
          "REFRESH_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "REFRESH_TOKEN"
            }
          }
        }
```

```
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",
```

```
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
               "smithy.api#required": {}
            }
          },
          "TagKeys": {
            "target": "com.amazonaws.licensemanager#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
        },
        "output": {

 "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
```

```
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseConfigurationStatus": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
                "traits": {
                    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
    configuration is licenseAffinityToHost.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
```

```
                "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
              }
            },
            "Name": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>New name
 of the license configuration.</p>"
              }
            },
            "Description": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>New description of the license configuration.</p>"
              }
            },
            "ProductInformationList": {
              "target": "com.amazonaws.licensemanager#ProductInformationList",
              "traits": {
                "smithy.api#documentation": "<p>New product information.</p>"
              }
            },
            "DisassociateWhenNotFound": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
              }
            }
          },
          "traits":
{
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
          },
          "output": {
```

```
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n         <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
```

```
                "smithy.api#documentation": "<p>Name of the report generator.</p>",
                "smithy.api#required": {}
              }
            },
            "Type": {
              "target": "com.amazonaws.licensemanager#ReportTypeList",
              "traits": {
                "smithy.api#documentation":
 "<p>Type of reports to generate. The following report types are supported:</p>\n          <ul>\n          <li>\n
<p>License configuration report - Reports the number and details of consumed licenses for a license
configuration.</p>\n          </li>\n          <li>\n          <p>Resource report - Reports the tracked licenses and
resource consumption for a license configuration.</p>\n          </li>\n          </ul>",
                "smithy.api#required": {}
              }
            },
            "ReportContext": {
              "target": "com.amazonaws.licensemanager#ReportContext",
              "traits": {
                "smithy.api#documentation": "<p>The report context.</p>",
                "smithy.api#required": {}
              }
            },
            "ReportFrequency": {
              "target": "com.amazonaws.licensemanager#ReportFrequency",
              "traits":
 {
                "smithy.api#documentation": "<p>Frequency by which reports are generated.</p>",
                "smithy.api#required": {}
              }
            },
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientRequestToken",
              "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            },
            "Description": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
```

```
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n          <p>You can update the license specifications of AMIs, instances, and
hosts.\n          You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
        }
    },
```

```
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
```

```
        }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#UsageOperation": {
          "type": "string",
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 50
            }
          }
        },
        "com.amazonaws.licensemanager#ValidationException": {
          "type": "structure",
          "members": {
            "Message": {
              "target": "com.amazonaws.licensemanager#Message"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

         "smithy.api#error": "client",
            "smithy.api#httpError": 400
          }
        }
      }
    }
    CheckoutLicense
     Initialize stack step
      spanInitializeStart
      RegisterServiceMetadata
      legacyEndpointContextSetter
      SetLogger
      OperationInputValidation
      spanInitializeEnd
     Serialize stack step
```

spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.106 github.com/aws/aws-sdk-go-v2/internal/endpoints/v2 2.6.34

1.106.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string
```

```
 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
 return err
 }
 if err = addRetry(stack, options); err != nil {
 return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
 return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
```

```
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
```

```
        with:
          path: new-ref
          fetch-depth: 0
      - name: Get Diff
        run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }} ${{ github.sha }} > refDiffFiles.txt
      - name: Get Target Files
        run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
      - name: Checkout scancode
        uses: actions/checkout@v2
        with:
          repository: nexB/scancode-toolkit
          path: scancode-toolkit
          fetch-depth: 1
      - name: Set up Python ${{ matrix.python-version }}
         uses: actions/setup-python@v2
        with:
          python-version: ${{ matrix.python-version }}
      # ScanCode
      - name: Self-configure scancode
        working-directory: ./scancode-toolkit
        run: ./scancode --help
      - name: Run Scan code on target
        run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
      - name: Run Scan code on pr ref
        run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
      # compare
      - name: License test
        run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi
ListLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
```

```
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 Retry
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
```

```
 return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string
```

```
 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if
err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err
 = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType
```

```
 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
```

```
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
```

```
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
```

```
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
```

```
 return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
```

```
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
 Region:       region,
 ServiceID:    ServiceID,
 OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
 spanInitializeStart
 RegisterServiceMetadata
 legacyEndpointContextSetter
 SetLogger
 OperationInputValidation
 spanInitializeEnd
 Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 OperationSerializer
 Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
 Finalize stack step
 spanRetryLoop
 Retry
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
 Deserialize stack step
```

AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer

```
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
```

```
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "GetLicense",
 }
}
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
```

```
 spanRetryLoop
 Retry
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
```

```
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
```

```
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
```

```
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
   "smithy": "2.0",
```

```
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own
License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
           "traits": {
             "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider
```

```
resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                 }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
           },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetRegisteredSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
              "smithy.api#required": {}
            }
          }
        },
```

```
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

          "traits": {
                    "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
                 }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved
subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetServiceSettings"

          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has been enabled, and which Regions data will be aggregated from.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
              }
            },
            "StatusMessage": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
              "traits": {
                "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
              }
            },
            "HomeRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
               "traits": {
                "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated data for Linux\n      subscriptions.</p>"
              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
          "type": "structure",
          "members": {
            "AmiId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
              }
            },
            "InstanceID": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
              }
```

```
        },
        "InstanceType": {
          "target": "smithy.api#String",
          "traits":
{
            "smithy.api#documentation": "<p>The instance type of the resource.</p>"
          }
        },
        "AccountID": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of the instance.</p>"
          }
        },
        "Region": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
          }
        },
        "UsageOperation": {
          "target": "smithy.api#String",

   "traits": {
            "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
          }
        },
        "ProductCode": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
          "traits": {
            "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
          }
        },
        "LastUpdatedTime": {
          "target": "smithy.api#String",
           "traits": {
            "smithy.api#documentation": "<p>The time in which the last discovery updated the instance
```

```
details.</p>"
                }
            },
            "SubscriptionName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
                }
            },
            "OsVersion": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The operating system software version that runs on your
instance.</p>"
                }
            },
            "SubscriptionProviderCreateTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
                }
            },
            "SubscriptionProviderUpdateTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
                }
            },
            "DualSubscription": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
                }
            },
            "RegisteredWithSubscriptionProvider": {
                "target": "smithy.api#String",
                "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
```

```
subscriptions.</p>"
            }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
            "type": "list",
            "member": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
            }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
            "type": "structure",
            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
                "smithy.api#error": "server"
            }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
            "type": "service",
            "version": "2018-05-10",
            "operations": [
                {
                    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
                },
                {
                    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
                },
                {
                    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
                },
                {
                    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
                },
                {
                    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
                 },
                {
                    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
                },
                {
                    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
                },
                {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
          }
        ],
        "traits": {
          "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
             "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
          },
          "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
          },
          "aws.protocols#restJson1": {},
          "smithy.api#cors": {
            "additionalAllowedHeaders": [
              "*",
              "content-type",
              "x-amz-content-sha256",
              "x-amz-user-agent",
              "x-amzn-platform-id",
              "x-amzn-trace-id"
            ],
            "additionalExposedHeaders": [
              "x-amzn-errortype",
              "x-amzn-requestid",
              "x-amzn-trace-id"
            ]
          },
          "smithy.api#documentation": "<p>With License Manager,
    you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
          "smithy.api#title": "AWS License Manager Linux Subscriptions",
          "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
              "Region": {
                "builtIn": "AWS::Region",
                "required": false,
                "documentation": "The AWS region used to dispatch the request.",
                "type": "String"
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        },
        "UseDualStack": {
          "builtIn": "AWS::UseDualStack",
          "required": true,
          "default": false,
          "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
           "type": "Boolean"
        },
        "UseFIPS": {
          "builtIn": "AWS::UseFIPS",
          "required": true,
          "default": false,
          "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
          "type": "Boolean"
        },
        "Endpoint": {
          "builtIn": "SDK::Endpoint",
          "required": false,
          "documentation": "Override the endpoint used to send this request",
          "type": "String"
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      "rules": [
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              "argv": [
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                  "ref": "Endpoint"
                }
              ]
            }
          ],
          "rules": [
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              "conditions": [
                {
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                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },
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```
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                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
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                                "headers": {}
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                "conditions": [],
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                        "conditions": [
                            {
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                    "assign": "PartitionResult"
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                        "argv": [
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},
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                        ]
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                    ]
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                        "argv": [

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                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }
                    ]
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                    "conditions": [],

    "rules": [
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                          "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
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                          "headers": {}
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```
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                                                    "ref": "PartitionResult"
                                                },
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                                            ]
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```

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                                                "headers": {}
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                                            "type": "endpoint"
                                        }
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                                    "type": "tree"
                                }
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 but this partition does not support FIPS",
                            "type": "error"
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                                },
                                true

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```

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                    "argv": [
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                      {
                        "fn": "getAttr",
                        "argv": [
                          {

                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }
                    ]
                  }
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                "rules": [
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                    "conditions": [],
                    "rules": [

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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                          },
                          "type": "endpoint"
                        }
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                      "type": "tree"

                  }
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                "type": "tree"
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              {
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                "type": "error"
              }
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            "type": "tree"
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```

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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
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                                                "headers": {}
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                                            "type": "endpoint"
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                            "type": "tree"
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                    "type": "tree"
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                    "error": "Invalid Configuration: Missing Region",
                    "type": "error"
                }
            ],
            "type": "tree"
        }
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"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
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      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {

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      "expect": {
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          "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
        }
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      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
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      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
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        }

  },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
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    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
        }
```

```
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
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      "expect": {
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          "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
       },
      "params": {
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        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
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        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
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                    "expect": {
                      "endpoint": {
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                      }
                    },
                    "params": {
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                      "UseFIPS": true,
                      "UseDualStack": true
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                    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
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                      }

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                    "params": {
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                      "UseDualStack": false
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                    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
                    "expect": {
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                    "params": {
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                      "UseDualStack": true
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  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
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        "UseDualStack": false
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      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {

    "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": true
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      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
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      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
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    },
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      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
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      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
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        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
```

```
            }
          },
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            "UseFIPS":
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            "UseDualStack": false
          }
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          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
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          "params": {
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            "UseFIPS": true,
            "UseDualStack": true
          }
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          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
             }
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          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
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        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {

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          "expect": {
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            "endpoint": {
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            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }

    },
          "params": {
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            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {

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          "expect": {
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
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                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                }
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            {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {

"Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "Missing region",
                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
            }
        ],
        "version": "1.0"
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "Enabled",
          "value": "Enabled",
          "documentation": "Enabled LinuxSubscriptionsDiscovery"

   },
        {
          "name": "Disabled",
          "value": "Disabled",
          "documentation": "Disabled LinuxSubscriptionsDiscovery"
        }
      ]
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
    "type": "structure",
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        "members": {
          "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
              "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },

  {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
```

```
            "uri": "/subscription/ListLinuxSubscriptionInstances"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "Instances"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
{
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n          <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n          <ul>\n          <li>\n
  <p>\n              <code>AccountID</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
    <code>AmiID</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>DualSubscription</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>InstanceID</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>InstanceType</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>ProductCode</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Region</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Status</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>UsageOperation</code>\n            </p>\n          </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code>
 values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n          <li>\n            <p>\n
<code>contains</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>equals</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>A token to specify where to
 start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                "smithy.api#length": {
                  "min": 1,
                  "max": 16384
                }
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
          "type": "structure",
          "members": {
            "Instances": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
              "traits": {
                "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
              }
            },
            "NextToken": {

           "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",

   "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n        <p>The valid names for this filter are:</p>\n        <ul>\n <li>\n            <p>\n                <code>Subscription</code>\n            </p>\n        </li>\n        </ul>\n <p>The
 valid Operators for this filter are:</p>\n        <ul>\n          <li>\n            <p>\n <code>contains</code>\n            </p>\n          </li>\n          <li>\n            <p>\n <code>equals</code>\n            </p>\n          </li>\n          <li>\n            <p>\n <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
```

```
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                     "min": 1,
                     "max": 16384
                  }
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
         "type": "structure",
         "members": {
            "Subscriptions": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
               "traits": {
                  "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
               }
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
         "type": "operation",
         "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
         },
         "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
         },
         "errors": [
            {
```

```
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "RegisteredSubscriptionProviders"
            }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
                "traits": {
                    "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to return \n\t\t\tin the list.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
```

```
  },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
          "RegisteredSubscriptionProviders": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
            }
          },

           "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {
```

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        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
                },
                {
                    "name": "CONTAINS",
                    "value": "Contains",
                    "documentation": "Contains operator"
                }
            ],
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
```

```
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/RegisterSubscriptionProvider"

          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
              "smithy.api#required": {}
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                "smithy.api#required": {}
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
          "type": "structure",
          "members": {
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
              "traits": {
                "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
              }
            },
            "SubscriptionProviderArn": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
              }
            },
            "SubscriptionProviderStatus": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
```

```
{
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

  }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
```

```
            {
              "name": "Successful",
              "value": "Successful",
              "documentation": "Successful status"
            },
            {
              "name": "Failed",
              "value": "Failed",
              "documentation": "Failed status"
            }
          ]
        }
      },

      "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#length": {
              "min": 1,
              "max": 100
            }
          }
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          },
          "smithy.api#uniqueItems": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
          "Name":
{
            "target": "smithy.api#String",
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```
            "traits": {
              "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
          },
          "Type": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
            }
          },
          "InstanceCount": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [

 {
              "name": "RedHat",
              "value": "RedHat",
              "documentation": "RedHat subscription provider namespace"
            }
```

```
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "ACTIVE",
            "value": "ACTIVE",
            "documentation": "ACTIVE status"
          },
          {
            "name": "INVALID",
            "value": "INVALID",

"documentation": "INVALID status"
          },
          {
            "name": "PENDING",
            "value": "PENDING",
            "documentation": "PENDING status"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
      "type": "operation",
      "input": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
{
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
```

```
            "traits": {
                "smithy.api#input": {}
            }

        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
            "type": "structure",
            "members": {},
            "traits": {
                "smithy.api#output": {}
            }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
            "type": "map",
            "key": {
                "target": "smithy.api#String"
            },
            "value": {
                "target": "smithy.api#String"
            },
            "traits": {
                "smithy.api#length": {
                    "min": 0,
                    "max": 50
                },
                "smithy.api#sensitive": {}
            }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
            "type": "structure",
            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation":
"<p>The request was denied due to request throttling.</p>",
                "smithy.api#error": "client"
            }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
            "type": "operation",
            "input": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
            },
            "output": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
           "smithy.api#http": {
            "method": "DELETE",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tagKeys": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
            "traits": {

           "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
              "smithy.api#httpQuery": "tagKeys",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
```

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    "members": {},
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

   },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/subscription/UpdateServiceSettings"
      },
      "smithy.api#idempotent": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
       "LinuxSubscriptionsDiscovery": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
        "traits": {
          "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
          "smithy.api#required": {}
        }
      },
      "LinuxSubscriptionsDiscoverySettings": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
        "traits": {
```

```
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowUpdate": {
              "target": "smithy.api#Boolean",
              "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home Region.</p>"
              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
          "type": "structure",
          "members": {
            "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
              }
            },
            "StatusMessage": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
              "traits": {
                "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
              }
```

```
        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
          "smithy.api#error": "client"
        }
      }
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {
```

```
// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
```

```
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
```

```
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
GetLicense
 Initialize stack step
  spanInitializeStart
```

RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
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```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
```

details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration. "
            }
          },
          "ActiveDirectoryType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
            "traits": {
              "smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
            }
          }
        },
        "traits": {
          "smithy.api#documentation": " Details about an Active Directory identity provider. "
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
          "DomainName": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " The domain name for the Active Directory. "
            }
          },
          "DomainIpv4List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
            "traits": {
              "smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
              "smithy.api#length": {
                "min": 1,
                "max": 2
              }
            }
          },
          "DomainCredentialsProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
            }
          },
          "DomainNetworkSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
            "traits": {

```
                "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "SELF_MANAGED",
              "value": "SELF_MANAGED",
              "documentation": "SELF_MANAGED type of Active Directory"
            },
            {
              "name": "AWS_MANAGED",
              "value": "AWS_MANAGED",
              "documentation": "AWS_MANAGED type of Active Directory"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
```

```
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n          <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n          </note>",
            "smithy.api#http":
 {
              "code": 200,
              "method": "POST",
              "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
```

```
                "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                "smithy.api#required": {}
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
              }
            }
          },
          "traits": {

        "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
          "type": "integer"
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
         }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
        "smithy.api#error": "server"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },

       {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS)
```

```
license server.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
          "type": "structure",
          "members": {
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
                "smithy.api#required": {}
              }
            },
            "LicenseServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for
the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                "smithy.api#required": {}
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
          "type": "structure",
          "members": {
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
```

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            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider specified in the request.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code> resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
          "SecretsManagerCredentialsProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user \n\t\t\tadministration.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
         ],
         "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
         "type": "structure",
         "members": {
            "LicenseServerEndpointArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                  "smithy.api#required": {}
               }
            },
             "ServerType": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
               "traits": {
                  "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}

    }
     },
     "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
     },
     "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity provider.</p>"
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
```

```
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to disassociate.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory domain.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },

   "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
```

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            "Attribute": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
               }
            },
            "Operation": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
               }
            },
            "Value": {
               "target": "smithy.api#String",
               "traits":
{
                  "smithy.api#documentation": "<p>Value of the filter.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
         "type": "union",
         "members": {
            "ActiveDirectoryIdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
                "traits": {
                  "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
```

```
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the
registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC
endpoints.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
                }
            },
            "FailureMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
                }
            }
        },
        "traits": {
```

```
            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
          "type": "list",
          "member": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
          "type": "structure",
          "members": {
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "Status": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                "smithy.api#required": {}
              }
            },
            "Products": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
               "traits": {
                "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                "smithy.api#required": {}
              }
            },
            "LastStatusCheckDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The date of the last status check.</p>"
              }
            },
            "StatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
              }
            }
          },
```

```
        "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },

    "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
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```
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance user.</p>"
              }
            },
            "StatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
              }
            },
            "AssociationDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
              }
            },
            "DisassociationDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
```

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    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
         "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
         },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
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        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",
```

```
            "x-api-key",
                "authorization",
                "x-amz-date",
                "x-amz-security-token",
                "Access-Control-Allow-Headers",
                "Access-Control-Allow-Methods",
                "Access-Control-Allow-Origin"
            ],
            "additionalExposedHeaders": [
                "x-amzn-errortype",
                "x-amzn-requestid",
                "x-amzn-trace-id"
            ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
                "Region":
{
                    "builtIn": "AWS::Region",
                    "required": false,
                    "documentation": "The AWS region used to dispatch the request.",
                    "type": "String"
                },
                "UseDualStack": {
                    "builtIn": "AWS::UseDualStack",
                    "required": true,
                    "default": false,
                    "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                    "type": "Boolean"
                },
                "UseFIPS": {
                    "builtIn": "AWS::UseFIPS",
                    "required": true,
                    "default": false,
                    "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                    "type": "Boolean"
                },
                "Endpoint": {
                    "builtIn": "SDK::Endpoint",
                    "required": false,
                    "documentation": "Override the endpoint used to send this request",
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      "type": "String"
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  },
  "rules": [
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          "fn": "isSet",
          "argv": [
            {
              "ref": "Endpoint"
            }
          ]
        }
      ],
      "rules": [
        {
          "conditions": [
            {
              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseFIPS"
                },
                true
              ]
            }
          ],
          "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
          "type": "error"
        },
        {
          "conditions": [
            {

              "fn": "booleanEquals",
              "argv": [
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                  "ref": "UseDualStack"
                },
                true
              ]
            }
          ],
          "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
          "type": "error"
        },
        {
```

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                    "ref": "Endpoint"
                  },

"properties": {},
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                },
                "type": "endpoint"
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            ],
            "type": "tree"
          },
          {
            "conditions": [
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                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
            "rules": [
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                "conditions": [
                  {
                    "fn": "aws.partition",

                   "argv": [
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
                "rules": [
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                    "conditions": [
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                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseFIPS"
                          },
```

```
true
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              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
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                "conditions": [
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"fn": "booleanEquals",
                    "argv": [
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                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  },

                {
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                    "argv": [
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                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }
```

```
                ]
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                ],
                "rules": [
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }

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            {
                "conditions": [],
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both",
                "type": "error"
            }
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        "type": "tree"
    },
    {
        "conditions": [
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                "fn": "booleanEquals",
                "argv": [

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                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
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            {
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                    {
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                        "argv": [
                            {
                                "fn": "getAttr",
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                                "argv": [

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                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            },
                            true
                        ]
                    }
                ],
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                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled but this partition does not support FIPS",
                    "type": "error"

}
                ],
                "type": "tree"
            },
            {
                "conditions": [
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                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
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                {

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                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {
                              "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                          ]

        }
                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }

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                },
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                  "error": "DualStack is enabled but this partition does not support DualStack",
                  "type": "error"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [],
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
```

```
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                        "headers": {}
                    },
                    "type": "endpoint"
                }
            ],
            "type": "tree"
        }
      ],
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    },
    {
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      "error": "Invalid Configuration: Missing Region",
      "type": "error"
    }
  ]
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"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect":
{
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",

    "UseFIPS": true,
        "UseDualStack": false
      }
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    },
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      "expect": {
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        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
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    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
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{
          "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS":
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        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
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```
            }
          },
          "params": {
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            "UseFIPS": true,
            "UseDualStack": false
          }
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        {
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          "expect": {
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{
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            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
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            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
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          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
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                    }
                  },
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                    "UseFIPS": true,
                    "UseDualStack": false
                  }
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                  "expect": {
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                    }
                  },
                  "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": false,
                     "UseDualStack": true
                  }
                },
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                  "expect": {
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                    }
                  },
                  "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
                  "expect": {
                    "error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
                  },
                  "params": {
                    "Region": "us-iso-east-1",
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            "UseFIPS": true,
            "UseDualStack": true
          }
        },
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          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false

}
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
            }

      },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
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      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
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    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-isob-east-1",

 "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {
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```
      "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack":
false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
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```
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "Missing region",
                  "expect": {
                    "error": "Invalid Configuration: Missing Region"
                  }
                }
              ],
              "version": "1.0"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
          "type": "structure",
          "members": {
            "ProvisioningStatus": {
              "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
               "traits": {
                 "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
              }
            },
            "HealthStatus": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
              "traits": {
                "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
              }
            },
            "Ipv4Address": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Information
 about a Remote Desktop Services (RDS) license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
          "type": "structure",
          "members": {
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            "IdentityProviderArn": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
               }
            },
            "ServerType": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
               "traits": {
                  "smithy.api#documentation": "<p>The type of license server.</p>"
               }
            },
            "ServerEndpoint": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

   "traits": {
                  "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
               }
            },
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
               }
            },
            "LicenseServerEndpointId": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
               }
            },
            "LicenseServerEndpointArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits":
{
                  "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
               }
            },
            "LicenseServerEndpointProvisioningStatus": {
               "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
               "traits": {
                  "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
```

```
            }
          },
          "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
          },

         "CreationTime": {
            "target": "smithy.api#Timestamp",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp when License Manager created the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

  "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "PROVISIONING",
              "value": "PROVISIONING",
              "documentation": ""
            },
            {
              "name": "PROVISIONING_FAILED",
              "value": "PROVISIONING_FAILED",
              "documentation": ""
            },
            {
```

```
            "name": "PROVISIONED",
            "value": "PROVISIONED",
            "documentation": ""
          },
          {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""

          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
      }
    },
     "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
      "type": "list",
      "member": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
          "type": "structure",
          "members": {
            "ServerType": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
              "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>",
                "smithy.api#required": {}
              }
            },
            "ServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {

            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/identity-provider/ListIdentityProviders"
             },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "IdentityProviderSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
         "type": "structure",
         "members": {
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use
 the following filters to streamline results:</p>\n        <ul>\n            <li>\n                <p>Product</p>\n            </li>\n
        <li>\n                <p>DirectoryId</p>\n            </li>\n        </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
```

```
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

            "traits": {
                "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
                "smithy.api#required": {}
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
          "type": "operation",
           "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
```

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            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },

      {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "InstanceSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
         "type": "structure",
         "members":
 {
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
```

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\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n
        <li>\n            <p>InstanceId</p>\n          </li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next
 token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
```

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        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },

          "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
```

```
                }
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
          "type": "structure",
          "members": {
            "LicenseServerEndpoints": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
              "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
          "type":
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 "operation",
        "input": {
           "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
           "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
           {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
           },
           {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
           },
           {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
           },
           {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
           },
           {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
           {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
           },
           {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
           }
        ],
        "traits": {
           "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
           "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/ListProductSubscriptions"
           },
           "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "ProductUserSummaries"
           }
        }
     },
     "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
```

```
{
        "type": "structure",
        "members": {
           "Product": {
              "target": "smithy.api#String",
              "traits": {
                 "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
              }
           },
           "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                 "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                 "smithy.api#required": {}
              }
           },
           "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                 "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
           },
           "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                 "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n             <p>Status</p>\n          </li>\n          <li>\n             <p>Username</p>\n
</li>\n          <li>\n             <p>Domain</p>\n          </li>\n       </ul>"
              }
           },
           "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                 "smithy.api#documentation": "<p>A token to specify where to start paginating.
 This is the nextToken \n\tfrom a previously truncated response.</p>"
              }
           }
        },
        "traits": {
           "smithy.api#input": {}
        }
     },
     "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
```

```
        "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service
 hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#readonly": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}

          }
        }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which
provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
```

```
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {

    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n        <ul>\n
  <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n          </li>\n
<li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummaries": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
```

```
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username":
{
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
           "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
```

```
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
            }
          },
          "SubscriptionStartDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
          },
          "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
          "RdsSalCredentialsProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
```

```
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
```

```
        "type": "structure",
        "members": {
          "IdentityProvider": {

    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits":
 {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation":
```

```
 "<p>Metadata that describes the results of an identity provider operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",

   "smithy.api#error": "client",
            "smithy.api#httpError": 404
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
            "SecretId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                    "smithy.api#length": {
                        "min": 1
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
      "type": "string",
      "traits": {
        "smithy.api#length": {

         "min": 5,
          "max": 200
        },
        "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
      "type": "structure",
      "members": {
        "Endpoint": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
      "type": "union",
      "members": {
        "RdsSalSettings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
           "traits": {
            "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "RDS_SAL",
            "value": "RDS_SAL",
```

```
                "documentation": ""
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
          "type": "structure",
          "members": {
            "message": {

  "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Settings": {
          "type": "structure",
          "members": {
            "Subnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                "smithy.api#length": {
                  "min": 1
                },
                "smithy.api#required": {}
              }
            },
            "SecurityGroupId": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

             "traits": {
                "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
          }
        },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

      },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n        <note>\n        <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/user/StartProductSubscription"
        }

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
```

```
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {

 "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n          <p>Valid values:
<code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n
</p>",
              "smithy.api#required": {}
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }

 }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
```

```
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

    },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

    },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
```

```
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/StopProductSubscription"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
               }
            },
            "IdentityProvider": {
               "target":
 "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
               }
            },
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "ProductUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"

               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
               }
            }
```

```
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }

  }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
```

```
 "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
 "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation":
"<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
          "smithy.api#error": "client"
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {

       "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
        "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}

      }
        },
        "TagKeys": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
          "traits": {
            "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
            "smithy.api#httpQuery": "tagKeys",
            "smithy.api#required": {}
          }
        }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {

     "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
```

```
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },

          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
            }
          },
          "UpdateSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
            "traits": {
              "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n          <li>\n            <p>Subnets which you want to add to provision VPC endpoints.</p>\n          </li>\n
      <li>\n            <p>Subnets which you want to remove the VPC endpoints from.</p>\n          </li>\n
<li>\n            <p>Security
 group ID which permits traffic to the VPC endpoints.</p>\n          </li>\n        </ul>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#required": {}
            }
          }
        },
```

```
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
      "type": "structure",
      "members": {
        "AddSubnets": {

       "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
            "smithy.api#required": {}
          }
        },
        "RemoveSubnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
            "smithy.api#required": {}
          }
        },
        "SecurityGroupId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
          "traits": {
            "smithy.api#documentation": "<p>A security group ID that
 allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for
activation servers.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A parameter is not valid.</p>",
        "smithy.api#error": "client"
      }
```

```
      }
    }
  }
ListReceivedLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
```

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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
```

```
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options); err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
 return err
}
if err = addSpanBuildRequestStart(stack); err != nil {
 return err
}
if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
}
return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
 Region:        region,
 ServiceID:     ServiceID,
 OperationName: "CheckInLicense",
}
}
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpResponseCodeSemantics",
        "namespace": "*"
      },
      {
```

```
            "id": "PaginatedTrait",
            "namespace": "*"
        },
        {
            "id": "HttpHeaderTrait",
            "namespace": "*"
        },
        {
            "id": "HttpUriConflict",
            "namespace": "*"
        },
        {
            "id": "Service",
            "namespace": "*"
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
            },
            {
```

```
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
        },
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            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
        },
        {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
        },
        {
            "target": "com.amazonaws.licensemanager#CreateToken"
        },
        {
            "target": "com.amazonaws.licensemanager#DeleteGrant"
        },
        {
            "target": "com.amazonaws.licensemanager#DeleteLicense"
        },
        {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
        },
        {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
        },
        {
            "target": "com.amazonaws.licensemanager#DeleteToken"
        },
        {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

    },
        {
            "target": "com.amazonaws.licensemanager#GetAccessToken"
        },
        {
            "target": "com.amazonaws.licensemanager#GetGrant"
        },
        {
            "target": "com.amazonaws.licensemanager#GetLicense"
        },
        {
            "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
        },
        {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
        },
        {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
        },
```

```
{
   "target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
   "target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
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 },
{
   "target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
   "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenses"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

  "target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
   "target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
   "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
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   "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
   "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
   "target": "com.amazonaws.licensemanager#ListResourceInventory"
```

```
        },
        {
          "target": "com.amazonaws.licensemanager#ListTagsForResource"
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          "target": "com.amazonaws.licensemanager#ListTokens"
        },
        {
          "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
        },
        {
          "target": "com.amazonaws.licensemanager#RejectGrant"
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          "target": "com.amazonaws.licensemanager#TagResource"
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        {
          "target": "com.amazonaws.licensemanager#UntagResource"
        },
        {
          "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
        },
        {
          "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
        },
        {
          "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
        },
        {
          "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager",
          "arnNamespace": "license-manager",
          "cloudFormationName": "LicenseManager",
          "cloudTrailEventSource": "licensemanager.amazonaws.com",
          "endpointPrefix": "license-manager"
        },
        "aws.auth#sigv4": {
          "name": "license-manager"
        },
        "aws.protocols#awsJson1_1": {},
        "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software vendors across multiple \n        Amazon Web Services accounts and on-premises servers.</p>",
        "smithy.api#title": "AWS License Manager",
        "smithy.api#xmlNamespace": {
```

```
        "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
      },
      "smithy.rules#endpointRuleSet": {
        "version": "1.0",
        "parameters": {
          "Region": {
            "builtIn": "AWS::Region",
            "required": false,
            "documentation": "The AWS region used to dispatch the request.",
            "type": "String"
          },
          "UseDualStack": {
            "builtIn": "AWS::UseDualStack",
            "required": true,
            "default": false,
            "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
            "type": "Boolean"
          },
          "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
        },
        "rules": [
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            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]

              }
              ],
```

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                },
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              ]
            }
          ],
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          "type": "error"
        },
        {

"conditions": [
            {
              "fn": "booleanEquals",
              "argv": [
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                },
                true
              ]
            }
          ],
          "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
          "type": "error"
        },
        {
          "conditions": [],
          "endpoint": {
            "url": {
              "ref": "Endpoint"
             },
            "properties": {},
            "headers": {}
          },
          "type": "endpoint"
        }
      ]
    },
    {
      "conditions": [
```

```
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                    }
                  ]
                }
              ],
              "type": "tree",
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                        }
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                          "fn": "booleanEquals",
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                            {
                              "ref":
"UseFIPS"
                            },
                            true
                          ]
                        },
                        {
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                            },
                            true
                          ]
                        }
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```
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                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },
                              "supportsFIPS"
                            ]

                      }
                        ]
                      },
                      {
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                        "argv": [
                          true,
                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },

    "supportsDualStack"
                            ]
                          }
                        ]
                      }
                    ],
                    "type": "tree",
                    "rules": [
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                        "conditions": [],
                        "endpoint": {
                          "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                          "properties": {},
                          "headers": {}

                  },
                        "type": "endpoint"
```

```
                }
              ]
            },
            {
              "conditions": [],
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both",
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            }
          ]
        },
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          "conditions": [
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                },
                true
              ]
            }
          ],
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            {
              "conditions": [
                {
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      {
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                        {
                          "ref": "PartitionResult"
                        },
                        "supportsFIPS"
                      ]
                    }
                  ]
                }
              ],
              "type": "tree",
              "rules": [
```

```
                {
                    "conditions": [],
                    "endpoint": {
                        "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
                        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }
            ]
        },
        {
            "conditions": [],
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partition does not support FIPS",
            "type": "error"
        }
    ]
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
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                },
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            ]
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            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },

    "supportsDualStack"
                                ]
```

```
                                    }
                                ]
                            }
                        ],
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                                "conditions": [],
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manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}

                            },
                                "type": "endpoint"
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                        ]
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ]
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                     "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    }
]
},
{
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
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        {
          "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager.af-south-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "af-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-east-1",
            "UseFIPS": false,
            "UseDualStack": false
           }
        },
        {
          "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-northeast-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-northeast-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-northeast-2.amazonaws.com"
             }
          },
          "params": {
```

```
            "Region": "ap-northeast-2",
            "UseFIPS": false,
            "UseDualStack": false
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        },
        {
          "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-northeast-3.amazonaws.com"
            }
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          "params": {
            "Region": "ap-northeast-3",
            "UseFIPS": false,
            "UseDualStack": false
          }

    },
        {
          "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
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              "url": "https://license-manager.ap-south-1.amazonaws.com"
            }
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          "params": {
            "Region": "ap-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-1.amazonaws.com"

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          "params": {
            "Region": "ap-southeast-1",
            "UseFIPS": false,
            "UseDualStack": false
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        },
        {
          "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
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      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-southeast-2.amazonaws.com"
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      },
      "params": {
        "Region": "ap-southeast-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-southeast-3.amazonaws.com"
        }
      },
      "params": {
        "Region": "ap-southeast-3",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ca-central-1.amazonaws.com"
        }
      },

     "params": {
        "Region": "ca-central-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-central-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-central-1",
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            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-north-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-north-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-south-1.amazonaws.com"
            }
          },
          "params": {
            "Region":
"eu-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-west-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
          "expect": {
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      "endpoint": {
          "url": "https://license-manager.eu-west-2.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-west-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-west-3.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-west-3",
        "UseFIPS": false,

"UseDualStack": false
      }
    },
    {
      "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.me-south-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "me-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.sa-east-1.amazonaws.com"
         }
      },
      "params": {
        "Region": "sa-east-1",
        "UseFIPS": false,
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            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }

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        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-east-2.amazonaws.com"
            }

         },
          "params": {
            "Region": "us-east-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
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            "url": "https://license-manager-fips.us-east-2.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-east-2",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.us-west-1.amazonaws.com"
          }
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        "params": {
          "Region": "us-west-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-west-1.amazonaws.com"
          }
        },
        "params": {

    "Region": "us-west-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
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      {
        "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.us-west-2.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-west-2",
          "UseFIPS": false,
          "UseDualStack": false
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      "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

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          "url": "https://license-manager-fips.us-west-2.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-west-2",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,

        "UseDualStack": true
      }
    },
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      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
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    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url":
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"https://license-manager.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-northwest-1",
            "UseFIPS": false,
            "UseDualStack": false

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        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
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          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
             }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
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      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },

{
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
        }
       },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
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    {
      "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-west-1.amazonaws.com"
        }
      },
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            "params": {
              "Region": "us-gov-west-1",
              "UseFIPS": false,
              "UseDualStack": false
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            "documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-gov-west-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-fips.us-gov-east-1.api.aws"
              }
            },

        "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
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      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
         "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled
but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
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```
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },

  {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },

"params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
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            "UseDualStack": true
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

    "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,

      "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips enabled and dualstack disabled",
          "expect": {
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips disabled and dualstack enabled",
          "expect": {
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                    "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "Missing region",
                  "expect": {
                    "error": "Invalid Configuration: Missing Region"
                  }
                }
              ],
              "version": "1.0"
            }
          }
        },
        "com.amazonaws.licensemanager#AcceptGrant": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
          "output": {
            "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
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            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"

   }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
         }
      },
      "com.amazonaws.licensemanager#AcceptGrantRequest": {
         "type": "structure",
         "members": {
            "GrantArn": {
               "target": "com.amazonaws.licensemanager#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanager#AcceptGrantResponse": {
         "type": "structure",
         "members": {
            "GrantArn": {
               "target": "com.amazonaws.licensemanager#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>Grant
ARN.</p>"
               }
            },
            "Status": {
               "target": "com.amazonaws.licensemanager#GrantStatus",
               "traits": {
                  "smithy.api#documentation": "<p>Grant status.</p>"
               }
            },
            "Version": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Grant version.</p>"
               }
            }
         },
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      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#AccessDeniedException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
          "httpResponseCode": 401
        },
        "smithy.api#documentation": "<p>Access to resource denied.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 401
      }
    },
    "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
      "type": "enum",
      "members": {
        "DISTRIBUTED_GRANTS_ONLY": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
          }
        },
        "ALL_GRANTS_PERMITTED_BY_ISSUER": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#AllowedOperation": {

   "type": "enum",
      "members": {
        "CREATE_GRANT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "CreateGrant"
          }
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            },
            "CHECKOUT_LICENSE": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "CheckoutLicense"
              }
            },
            "CHECKOUT_BORROW_LICENSE": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "CheckoutBorrowLicense"
              }
            },
            "CHECK_IN_LICENSE": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "CheckInLicense"
              }
            },
            "EXTEND_CONSUMPTION_LICENSE":
{
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "ExtendConsumptionLicense"
              }
            },
            "LIST_PURCHASED_LICENSES": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "ListPurchasedLicenses"
              }
            },
            "CREATE_TOKEN": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "CreateToken"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#AllowedOperationList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#AllowedOperation"
          },
          "traits": {
            "smithy.api#length": {
              "min": 1,
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            "max":
7
          }
        }
      },
      "com.amazonaws.licensemanager#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 2048
          },
          "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
      },
      "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Arn"
        }
      },
      "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError":
{
            "code": "AuthorizationFailure",
            "httpResponseCode": 403
          },
          "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n        policy associated with this account.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 403
        }
      },
      "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
          "LastRunTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
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```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
      },

    "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
          "smithy.api#default": false
        }
      },
      "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
          "AllowEarlyCheckIn": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
              "smithy.api#required": {}
            }
          }

},
        "traits": {
          "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
      },
      "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
      },
      "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
      },
      "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

    },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "Beneficiary": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>License beneficiary.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanager#CheckInLicenseResponse": {
         "type": "structure",
         "members": {},
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
               "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
{
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n         For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
```

```
            "NodeId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
              }
            },
            "CheckoutMetadata": {
              "target": "com.amazonaws.licensemanager#MetadataList",
              "traits": {
                "smithy.api#documentation": "<p>Information about constraints.</p>"
              }
            },
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientToken",
              "traits": {
                "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
              }
            },
            "LicenseConsumptionToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
              }
            },
            "EntitlementsAllowed":
{
              "target": "com.amazonaws.licensemanager#EntitlementDataList",
              "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
              }
            },
            "NodeId": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
          },
          "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
              "smithy.api#documentation": "<p>Signed token.</p>"
            }
          },
          "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
            }
          },
          "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
            }
          },
          "CheckoutMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Information about constraints.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
```

```
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n        <p>If the
account that created the license is the same that is performing the check out, you must\n            specify the account
as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
```

```
                "smithy.api#documentation": "<p>Checkout type.</p>",
                "smithy.api#required": {}
              }
            },
            "KeyFingerprint": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                "smithy.api#required": {}
              }
            },
            "Entitlements": {
              "target": "com.amazonaws.licensemanager#EntitlementDataList",
              "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",

        "smithy.api#required": {}
              }
            },
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientToken",
              "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            },
            "Beneficiary": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>"
              }
            },
            "NodeId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
              }
            }
          },
          "traits": {

           "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#CheckoutLicenseResponse": {
          "type": "structure",
          "members": {
```

```
        "CheckoutType": {
          "target": "com.amazonaws.licensemanager#CheckoutType",
          "traits": {
            "smithy.api#documentation": "<p>Checkout type.</p>"
          }
        },
        "LicenseConsumptionToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License consumption token.</p>"
          }
        },
        "EntitlementsAllowed": {
          "target": "com.amazonaws.licensemanager#EntitlementDataList",
          "traits": {
            "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
          }
        },
        "SignedToken": {
          "target": "com.amazonaws.licensemanager#SignedToken",
          "traits": {
            "smithy.api#documentation": "<p>Signed token.</p>"
          }
        },
        "NodeId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Node ID.</p>"
          }
        },
        "IssuedAt": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
          }
        },
        "Expiration": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
          }
        },
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
          }
```

```
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CheckoutType": {
    "type": "enum",
    "members": {
        "PROVISIONAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PROVISIONAL"
            }
        },
        "PERPETUAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PERPETUAL"
            }
        }
    }
},
"com.amazonaws.licensemanager#ClientRequestToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 36
        }
    }
},
"com.amazonaws.licensemanager#ClientToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
        },
        "smithy.api#pattern": "^\\S+$"
    }
},
"com.amazonaws.licensemanager#ConflictException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
```

```
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },

 "traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
            "RenewType": {
                "target": "com.amazonaws.licensemanager#RenewType",
                "traits": {
                    "smithy.api#documentation": "<p>Renewal frequency.</p>"
                }
```

```
            },
            "ProvisionalConfiguration": {
               "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
               "traits": {
                  "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
               }
            },
            "BorrowConfiguration": {
               "target": "com.amazonaws.licensemanager#BorrowConfiguration",
               "traits": {
                  "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
         }
      },
      "com.amazonaws.licensemanager#CreateGrant": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
```

```
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of license\n          entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
          }
        },
        "com.amazonaws.licensemanager#CreateGrantRequest": {
          "type": "structure",
          "members": {
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientToken",
              "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            },
            "GrantName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Grant name.</p>",
                "smithy.api#required": {}

    }
            },
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
              }
            },
            "Principals": {
              "target": "com.amazonaws.licensemanager#PrincipalArnList",
              "traits": {
                "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an Amazon Resource Name\n          (ARN):</p>\n          <ul>\n            <li>\n              <p>An Amazon Web Services account, which includes only the account specified.</p>\n            </li>\n          </ul>\n          <ul>\n            <li>\n              <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n            </li>\n          </ul>\n          <ul>\n            <li>\n              <p>An organization, which will include all accounts across your organization.</p>\n            </li>\n          </ul>",
                "smithy.api#required": {}
              }
```

```
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the grant.</p>",
            "smithy.api#required": {}
          }
        },
        "AllowedOperations": {
          "target": "com.amazonaws.licensemanager#AllowedOperationList",
          "traits": {
            "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },

  "com.amazonaws.licensemanager#CreateGrantResponse": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CreateGrantVersion":
```

```
{
        "type": "operation",
        "input": {
           "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
           "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
           {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
           },
           {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
           },
           {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
           {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
           },
           {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
           },
           {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
           {
              "target": "com.amazonaws.licensemanager#ValidationException"
           }
        ],
        "traits": {
           "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information,
see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
     },
     "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
           "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientToken",
              "traits": {
                 "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",

   "smithy.api#required": {}
              }
```

```
    },
    "GrantArn": {
      "target": "com.amazonaws.licensemanager#Arn",
      "traits": {
        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
        "smithy.api#required": {}
      }
    },
    "GrantName": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Grant name.</p>"
      }
    },
    "AllowedOperations": {
      "target": "com.amazonaws.licensemanager#AllowedOperationList",
      "traits": {
        "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#GrantStatus",
       "traits": {
        "smithy.api#documentation": "<p>Grant status.</p>"
      }
    },
    "StatusReason": {
      "target": "com.amazonaws.licensemanager#StatusReasonMessage",
      "traits": {
        "smithy.api#documentation": "<p>Grant status reason.</p>"
      }
    },
    "SourceVersion": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Current version of the grant.</p>"
      }
    },
    "Options": {
      "target": "com.amazonaws.licensemanager#Options",
      "traits": {
        "smithy.api#documentation": "<p>The options specified for the grant.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#input": {}
  }
```

```
    },
    "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>New version of the grant.</p>"
          }
        }
      },
      "traits":
{
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicense": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n            <p>A license configuration is an abstraction of a customer license agreement that can be\n            consumed and enforced by License Manager. Components include specifications for the license\n            type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n            Dedicated Instance, Dedicated Host, or
```

all of these), license affinity to host (how long a \n license must be associated with a host), and the number of licenses purchased and used. "
}
},
"com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
"type": "structure",
"members": {
"Name": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Name of the license configuration. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the license configuration. "
}
},
"LicenseCountingType": {
"target": "com.amazonaws.licensemanager#LicenseCountingType",
"traits": {
"smithy.api#documentation": " Dimension used to track the license inventory. ",
"smithy.api#required": {}
}
},
"LicenseCount": {
"target": "com.amazonaws.licensemanager#BoxLong",
"traits": {
"smithy.api#documentation": " Number of licenses managed by the license configuration. "
}
},
"LicenseCountHardLimit": {
"target": "com.amazonaws.licensemanager#BoxBoolean",
"traits": {
"smithy.api#documentation": " Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n blocks the launch of new instances. "
}
},
"LicenseRules": {
"target": "com.amazonaws.licensemanager#StringList",
"traits": {
"smithy.api#documentation": " License rules. The syntax is #name=value (for example, #allowedTenancy=EC2-DedicatedHost). The available rules \n vary by dimension, as follows. \n \n \n \n <code>Cores</code> dimension: <code>allowedTenancy</code> |\n <code>licenseAffinityToHost</code> |\n <code>maximumCores</code> |

<code>minimumCores</code>\n \n \n \n \n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n <code>maximumCores</code> |
<code>minimumCores</code> |\n <code>maximumSockets</code> | <code>minimumSockets</code> |\n
<code>maximumVcpus</code> | <code>minimumVcpus</code>\n \n \n
\n
\n <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n <code>maximumSockets</code> |
<code>minimumSockets</code>\n \n \n \n \n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n \n \n \n The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>. "
            }
          },

  "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": " Tags to add to the license configuration. "
            }
          },
          "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": " Product information. "
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",

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            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
    "type": "structure",
    "members": {
        "ResourceArn": {

            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
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                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting the license type for.</p>",
                "smithy.api#required": {}
              }
            },
            "SourceLicenseContext": {
              "target": "com.amazonaws.licensemanager#LicenseConversionContext",
              "traits": {
                "smithy.api#documentation": "<p>Information that identifies the license type you are converting from. \n\n  For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in the <i>License Manager User Guide</i>.</p>",
                "smithy.api#required": {}
              }
            },
            "DestinationLicenseContext":
 {
              "target": "com.amazonaws.licensemanager#LicenseConversionContext",
              "traits": {
                "smithy.api#documentation": "<p>Information that identifies the license type you are converting to. For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in the <i>License Manager User Guide</i>.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
          "type": "structure",
          "members": {
            "LicenseConversionTaskId": {
              "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

           "traits": {
                "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
          "type": "operation",
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        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "ReportGeneratorName":
{
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
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            "target": "com.amazonaws.licensemanager#ReportTypeList",
            "traits": {
              "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be generated:</p>\n <ul>\n <li>\n <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n </li>\n <li>\n <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n </li>\n </ul>",
              "smithy.api#required": {}
            }
          },
          "ReportContext": {
            "target": "com.amazonaws.licensemanager#ReportContext",
            "traits": {
              "smithy.api#documentation": "<p>Defines the type of license configuration the report generator tracks.</p>",
              "smithy.api#required": {}
            }
          },
          "ReportFrequency": {
            "target": "com.amazonaws.licensemanager#ReportFrequency",
            "traits": {
              "smithy.api#documentation": "<p>Frequency by which reports are generated.  Reports can be generated daily, monthly, or weekly.</p>",
              "smithy.api#required": {}
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientRequestToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
            }
          }
        },
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        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
generator.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
 name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits": {
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                "smithy.api#documentation": "<p>License issuer.</p>",
                "smithy.api#required": {}
              }
            },
            "HomeRegion": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Home Region for the license.</p>",
                "smithy.api#required": {}

  }
            },
            "Validity": {
              "target": "com.amazonaws.licensemanager#DatetimeRange",
              "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                "smithy.api#required": {}
              }
            },
            "Entitlements": {
              "target": "com.amazonaws.licensemanager#EntitlementList",
              "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
              }
            },
            "Beneficiary": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>",
                "smithy.api#required": {}
              }
             },
            "ConsumptionConfiguration": {
              "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
              "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n          usage.</p>",
                "smithy.api#required": {}
              }
            },
            "LicenseMetadata": {
              "target": "com.amazonaws.licensemanager#MetadataList",
              "traits": {
                "smithy.api#documentation": "<p>Information about the license.</p>"
              }
```

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        },
        "ClientToken": {
          "target": "com.amazonaws.licensemanager#ClientToken",
          "traits": {
            "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseResponse": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseStatus",
          "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
          }
        },
        "Version": {
           "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersion": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
      },
```

```
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target":
"com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>",
              "smithy.api#required": {}
            }
          },
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            "ProductName": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Product name.</p>",
                  "smithy.api#required": {}
               }
            },
            "Issuer": {
               "target": "com.amazonaws.licensemanager#Issuer",
               "traits":
{
                  "smithy.api#documentation": "<p>License issuer.</p>",
                  "smithy.api#required": {}
               }
            },
            "HomeRegion": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Home Region of the license.</p>",
                  "smithy.api#required": {}
               }
            },
            "Validity": {
               "target": "com.amazonaws.licensemanager#DatetimeRange",
               "traits": {
                  "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                  "smithy.api#required": {}
               }
            },
            "LicenseMetadata": {
               "target": "com.amazonaws.licensemanager#MetadataList",
               "traits": {
                   "smithy.api#documentation": "<p>Information about the license.</p>"
               }
            },
            "Entitlements": {
               "target": "com.amazonaws.licensemanager#EntitlementList",
               "traits": {
                  "smithy.api#documentation": "<p>License entitlements.</p>",
                  "smithy.api#required": {}
               }
            },
            "ConsumptionConfiguration": {
               "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
               "traits": {
                  "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
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workloads with offline\n        usage.</p>",
                    "smithy.api#required": {}
                }
            },

  "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>",
                    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>"
                }
            }
        },
        "traits": {

 "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New version of the license.</p>"
                }
            },
            "Status": {
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            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
{}
        }
      },
      "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },

      {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT
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token used to get an access token. With an access token,\n           you can call AssumeRoleWithWebIdentity to get
role credentials that you can use to \n           call License Manager to manage the specified license.</p>"
          }
       },
       "com.amazonaws.licensemanager#CreateTokenRequest": {
          "type": "structure",
          "members": {
             "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits":
{
                   "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is
mapped to the aud claim of the\n           JWT token.</p>",
                   "smithy.api#required": {}
                }
             },
             "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                   "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the
token. \n           License Manager does not check whether the roles are in use.</p>"
                }
             },
             "ExpirationInDays": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
                   "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The
default is 365 days.</p>"
                }
             },
             "TokenProperties": {
                 "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                   "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n           to the amr claim of the JWT token.</p>"
                }
             },
             "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                   "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                   "smithy.api#required": {}
                }
             }
          },
          "traits": {
             "smithy.api#input": {}
          }
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},
"com.amazonaws.licensemanager#CreateTokenResponse": {
   "type": "structure",
   "members": {
      "TokenId": {
         "target": "com.amazonaws.licensemanager#String",

       "traits": {
            "smithy.api#documentation": "<p>Token ID.</p>"
         }
      },
      "TokenType": {
         "target": "com.amazonaws.licensemanager#TokenType",
         "traits": {
            "smithy.api#documentation": "<p>Token type.</p>"
         }
      },
      "Token": {
         "target": "com.amazonaws.licensemanager#TokenString",
         "traits": {
            "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
         }
      }
   },
   "traits": {
      "smithy.api#output": {}
   }
},
"com.amazonaws.licensemanager#DateTime": {
   "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
   "type": "structure",
   "members": {
      "Begin": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
         "traits": {
            "smithy.api#documentation": "<p>Start of the time range.</p>",
            "smithy.api#required": {}
         }
      },
      "End": {
         "target": "com.amazonaws.licensemanager#ISO8601DateTime",
         "traits": {
            "smithy.api#documentation": "<p>End of the time range.</p>"
         }
      }
   },
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      "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
      }
    },
    "com.amazonaws.licensemanager#DeleteGrant": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
      }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
```

```
            }
          },
          "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
              "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the
grant.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
```

```
    "com.amazonaws.licensemanager#DeleteLicense": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Deletes the specified license.</p>"
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
      },
```

```
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n      <p>You cannot delete a license configuration that is in use.</p>"
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
      "type": "structure",
      "members":
{
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>ID of the license configuration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
```

```
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n          <p>This action deletes the report generator, which stops it from generating future reports.\n          The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
          }
        },
        "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
          "type": "structure",
          "members": {
            "LicenseManagerReportGeneratorArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
                "smithy.api#required": {}
              }
            }
```

```
        },
        "traits": {

 "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          },
          "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the license.</p>",
              "smithy.api#required":
{}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          },
          "DeletionDate": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#DeleteToken": {
          "type": "operation",
           "input": {
            "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

        {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
          }
        },
        "com.amazonaws.licensemanager#DeleteTokenRequest": {
          "type": "structure",
          "members": {
```

```
            "TokenId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#DeleteTokenResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}

          }
        },
        "com.amazonaws.licensemanager#DigitalSignatureMethod": {
          "type": "enum",
          "members": {
            "JWT_PS384": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "JWT_PS384"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#Entitlement": {
          "type": "structure",
          "members": {
            "Name": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement name.</p>",
                "smithy.api#required": {}
              }
            },
            "Value": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
              }
            },
```

```
            "MaxCount": {
              "target": "com.amazonaws.licensemanager#Long",
              "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
              }
            },
            "Overage": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
              }
            },
            "Unit": {
              "target": "com.amazonaws.licensemanager#EntitlementUnit",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement unit.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowCheckIn": {
              "target":
"com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
          }
        },
        "com.amazonaws.licensemanager#EntitlementData": {
          "type": "structure",
          "members": {
            "Name": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement data name.</p>",
                "smithy.api#required": {}
              }
            },
            "Value": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement
data value.</p>"
              }
            },
```

```
            "Unit": {
              "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement data unit.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
          }
        },
        "com.amazonaws.licensemanager#EntitlementDataList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
          }
        },
        "com.amazonaws.licensemanager#EntitlementDataUnit": {
          "type": "enum",
          "members": {
            "COUNT": {
              "target": "smithy.api#Unit",
              "traits": {

"smithy.api#enumValue": "Count"
              }
            },
            "NONE": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "None"
              }
            },
            "SECONDS": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Seconds"
              }
            },
            "MICROSECONDS": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Microseconds"
              }
            },
            "MILLISECONDS": {
              "target": "smithy.api#Unit",
```

```
            "traits": {
                "smithy.api#enumValue": "Milliseconds"
            }
        },
        "BYTES": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Bytes"
            }
        },
        "KILOBYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes"
            }
        },
        "MEGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes"
            }
        },
        "GIGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabytes"
            }
        },
        "TERABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes"
            }
        },
        "BITS":
{
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits"
            }
        },
        "KILOBITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits"
            }
        },
        "MEGABITS": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits"
            }
        },
        "GIGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits"
            }
        },
        "TERABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits"

}
        },
        "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Percent"
            }
        },
        "BYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes/Second"
            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
```

```
            "TERABYTES_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Terabytes/Second"
              }
            },
            "BITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Bits/Second"
              }
            },
            "KILOBITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
              }
            },
            "MEGABITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue":
"Megabits/Second"
              }
            },
            "GIGABITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
              }
            },
            "TERABITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Terabits/Second"
              }
            },
            "COUNT_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Count/Second"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#EntitlementList": {
          "type": "list",
          "member": {
```

```
            "target": "com.amazonaws.licensemanager#Entitlement"
          }
        },
        "com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
          "type": "structure",
          "members": {
            "Message": {
              "target": "com.amazonaws.licensemanager#Message"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
          }
        },
        "com.amazonaws.licensemanager#EntitlementUnit": {
          "type": "enum",
          "members": {
            "COUNT": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Count"
              }
            },
            "NONE": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "None"
              }
            },
            "SECONDS":
{
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Seconds"
              }
            },
            "MICROSECONDS": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Microseconds"
              }
            },
            "MILLISECONDS": {
              "target": "smithy.api#Unit",
              "traits": {
```

```
        "smithy.api#enumValue": "Milliseconds"
      }
    },
    "BYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Bytes"
      }
    },
    "KILOBYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Kilobytes"
       }
    },
    "MEGABYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Megabytes"
      }
    },
    "GIGABYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Gigabytes"
      }
    },
    "TERABYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Terabytes"
      }
    },
    "BITS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Bits"
      }
    },
    "KILOBITS": {
      "target": "smithy.api#Unit",
      "traits": {

       "smithy.api#enumValue": "Kilobits"
      }
    },
    "MEGABITS": {
      "target": "smithy.api#Unit",
```

```
            "traits": {
              "smithy.api#enumValue": "Megabits"
            }
          },
          "GIGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Gigabits"
            }
          },
          "TERABITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Terabits"
            }
          },
          "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Percent"
            }
          },
          "BYTES_PER_SECOND": {
            "target":
"smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Bytes/Second"
            }
          },
          "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Kilobytes/Second"
            }
          },
          "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Megabytes/Second"
            }
          },
          "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Gigabytes/Second"
            }
          },
          "TERABYTES_PER_SECOND": {
```

```
            "target": "smithy.api#Unit",
            "traits": {

"smithy.api#enumValue": "Terabytes/Second"
            }
          },
          "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Bits/Second"
            }
          },
          "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Kilobits/Second"
            }
          },
          "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Megabits/Second"
            }
          },
          "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Gigabits/Second"
            }
          },

       "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Terabits/Second"
            }
          },
          "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Count/Second"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#EntitlementUsage": {
        "type": "structure",
        "members": {
```

```
            "Name": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
              }
            },
            "ConsumedValue": {
              "target": "com.amazonaws.licensemanager#String",

            "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxCount": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
              }
            },
            "Unit": {
              "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
          }
        },
        "com.amazonaws.licensemanager#EntitlementUsageList":
{
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
          }
        },
        "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
          },
```

```
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
      }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
      "type": "structure",
      "members": {
        "LicenseConsumptionToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License consumption token.</p>",
            "smithy.api#required": {}

    }
        },
        "DryRun": {
          "target": "com.amazonaws.licensemanager#Boolean",
          "traits": {
            "smithy.api#default": false,
            "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions.</p>"
          }
        }
      },
      "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },

            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#FailedDependencyException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            },
            "ErrorCode": {
                "target": "com.amazonaws.licensemanager#String"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FailedDependency",
                "httpResponseCode": 424
            },
            "smithy.api#documentation":
"<p>A dependency required to run the API is missing.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 424
        }
    },
    "com.amazonaws.licensemanager#Filter": {
        "type": "structure",
        "members": {
```

```
            "Name": {
               "target": "com.amazonaws.licensemanager#FilterName",
               "traits": {
                  "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
               }
            },
            "Values": {
               "target": "com.amazonaws.licensemanager#FilterValues",
               "traits": {
                  "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only specify one value for the filter.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A filter
 name and value pair that is used to return more specific results from a\n          describe operation. Filters can be used to match a set of resources by specific criteria,\n          such as tags, attributes, or IDs.</p>"
         }
      },
      "com.amazonaws.licensemanager#FilterLimitExceededException": {
         "type": "structure",
         "members": {
            "Message": {
               "target": "com.amazonaws.licensemanager#Message"
            }
         },
         "traits": {
            "aws.protocols#awsQueryError": {
               "code": "FilterLimitExceeded",
               "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
         }
      },
      "com.amazonaws.licensemanager#FilterList": {
         "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#Filter"
         }
      },
      "com.amazonaws.licensemanager#FilterName": {
         "type": "string"
      },
      "com.amazonaws.licensemanager#FilterValue": {
         "type": "string"
```

```
    },
    "com.amazonaws.licensemanager#FilterValues": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
          "smithy.api#xmlName": "item"
        }
      }
    },
    "com.amazonaws.licensemanager#Filters": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
          "smithy.api#xmlName": "item"
        }
      }
    },
    "com.amazonaws.licensemanager#GetAccessToken": {
      "type": "operation",
      "input": {
         "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
```

```
tokens\n          are valid for one hour.</p>"
        }
      },
      "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
          "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
              "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
              "smithy.api#required": {}
            }
          },
          "TokenProperties": {
            "target": "com.amazonaws.licensemanager#MaxSize3StringList",
            "traits": {
              "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetAccessTokenResponse":
{
        "type": "structure",
        "members": {
          "AccessToken": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
              "smithy.api#documentation": "<p>Temporary access token.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#GetGrant": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetGrantRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#GetGrantResponse"
        },
```

```
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

    },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
```

```
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {

"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"

 },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
    }
```

```
    },
    "com.amazonaws.licensemanager#GetLicenseConfiguration": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
      }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
      "type": "structure",
      "members": {
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits":
 {
        "smithy.api#input": {}
      }
    },
```

```
"com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
        "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
            }
        },
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
             }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",

           "traits": {
                "smithy.api#documentation": "<p>Number of available licenses.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
```

```
        "traits": {
            "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
        }
    },
    "ConsumedLicenses": {
        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
            "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
        }
    },
    "Status": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>License configuration status.</p>"
        }

},
    "OwnerAccountId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
        }
    },
    "ConsumedLicenseSummaryList": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
        "traits": {
            "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
        }
    },
    "ManagedResourceSummaryList": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
        "traits": {
            "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
        }
    },
    "Tags": {
        "target": "com.amazonaws.licensemanager#TagList",
         "traits": {
            "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
        }
    },
    "ProductInformationList": {
        "target": "com.amazonaws.licensemanager#ProductInformationList",
        "traits": {
            "smithy.api#documentation": "<p>Product information.</p>"
        }
    },
    "AutomatedDiscoveryInformation": {
```

```
            "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
            "traits": {
              "smithy.api#documentation": "<p>Automated discovery information.</p>"
            }
          },
          "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTask": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {

 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
```

```
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information
on.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
            }
          },
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
            }
          },
          "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information
 about the license type converted from.</p>"
            }
          },
          "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
```

```
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
              "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
          },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
            }
          },
          "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
          },
          "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

          },
            {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
          }
        },
        "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
          "type": "structure",
          "members": {
            "LicenseManagerReportGeneratorArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                "smithy.api#required":
{}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
          "type": "structure",
          "members": {
            "ReportGenerator": {
              "target": "com.amazonaws.licensemanager#ReportGenerator",
              "traits": {
                "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
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```
configurations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {

 "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
            "License": {
                "target": "com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },

  "com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
```

```
        "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {

"target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
      }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
      "type": "structure",
      "members": {
```

```
            "LicenseUsage": {
                "target":
"com.amazonaws.licensemanager#LicenseUsage",
                "traits": {
                    "smithy.api#documentation": "<p>License usage details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
```

```
            "S3BucketArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n         and so on.</p>"

  }
            },
            "SnsTopicArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
              }
            },
            "OrganizationConfiguration": {
              "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
              "traits": {
                "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n         cross-account discovery.</p>"
              }
            },
            "EnableCrossAccountsDiscovery": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
              }

          },
            "LicenseManagerResourceShareArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n         provides member accounts with access to this share.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#Grant": {
          "type": "structure",
          "members": {
            "GrantArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
```

```
                "smithy.api#required": {}
              }
            },
            "GrantName": {

 "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Grant name.</p>",
                "smithy.api#required": {}
              }
            },
            "ParentArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Parent ARN.</p>",
                "smithy.api#required": {}
              }
            },
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>License ARN.</p>",
                "smithy.api#required": {}
              }
            },
            "GranteePrincipalArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {

"smithy.api#documentation": "<p>The grantee principal ARN.</p>",
                "smithy.api#required": {}
              }
            },
            "HomeRegion": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                "smithy.api#required": {}
              }
            },
            "GrantStatus": {
              "target": "com.amazonaws.licensemanager#GrantStatus",
              "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>",
                "smithy.api#required": {}
              }
            },
            "StatusReason": {
```

```
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
              "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>",
              "smithy.api#required": {}
            }
          },
          "GrantedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
              "smithy.api#documentation": "<p>Granted operations.</p>",
              "smithy.api#required": {}
            }
          },
          "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
              "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
"<p>Describes a grant.</p>"
        }
      },
      "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Grant"
        }
      },
      "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
          "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
          },
          "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
```

```
            "traits": {
              "smithy.api#enumValue": "PENDING_ACCEPT"
            }
          },
          "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "REJECTED"

          }
          },
          "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ACTIVE"
            }
          },
          "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
          },
          "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
          },
          "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_DELETE"
            }
          },
          "DISABLED": {
            "target": "smithy.api#Unit",
            "traits":
{
              "smithy.api#enumValue": "DISABLED"
            }
          },
          "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
          }
```

```
        }
      },
      "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>"
            }

},
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product name.</p>"
            }
          },
          "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product SKU.</p>"
            }
          },
          "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
              "smithy.api#documentation": "<p>Granted license issuer.</p>"
            }
          },
          "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

           }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
              "smithy.api#documentation": "<p>Granted license status.</p>"
            }
```

```
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
          }
        },
        "Beneficiary": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
          }
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
           "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>"
          }
        },
        "ConsumptionConfiguration": {
          "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
          }
        },
        "LicenseMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
            "smithy.api#documentation": "<p>Granted license metadata.</p>"
          }
        },
        "CreateTime": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

  }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Version of the granted license.</p>"
          }
        },
        "ReceivedMetadata": {
          "target": "com.amazonaws.licensemanager#ReceivedMetadata",
          "traits": {
```

```
                "smithy.api#documentation": "<p>Granted license received metadata.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
          }
        },
        "com.amazonaws.licensemanager#GrantedLicenseList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#GrantedLicense"
          }
        },
        "com.amazonaws.licensemanager#ISO8601DateTime":
{
          "type": "string",
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
          }
        },
        "com.amazonaws.licensemanager#Integer": {
          "type": "integer"
        },
        "com.amazonaws.licensemanager#InvalidParameterValueException": {
          "type": "structure",
          "members": {
            "Message": {
              "target": "com.amazonaws.licensemanager#Message"
            }
          },
          "traits": {
            "aws.protocols#awsQueryError": {
              "code": "InvalidParameterValueProvided",
              "httpResponseCode": 400
            },
            "smithy.api#documentation":
"<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
          }
        },
        "com.amazonaws.licensemanager#InvalidResourceStateException": {
```

```
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "InvalidResourceState",
            "httpResponseCode": 400
          },
          "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n         <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },

      "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the filter.</p>",
              "smithy.api#required": {}
            }
          },
          "Condition": {
            "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
            "traits": {
              "smithy.api#documentation": "<p>Condition of the filter.</p>",
              "smithy.api#required": {}
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
          }

    },
        "traits": {
          "smithy.api#documentation": "<p>An inventory filter.</p>"
        }
      },
```

```
"com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
        "EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EQUALS"
            }
        },
        "NOT_EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "NOT_EQUALS"
            }
        },
        "BEGINS_WITH": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "BEGINS_WITH"
            }
        },
        "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
                 "smithy.api#enumValue": "CONTAINS"
            }
        }
    }
},
"com.amazonaws.licensemanager#InventoryFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#InventoryFilter"
    }
},
"com.amazonaws.licensemanager#Issuer": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Issuer name.</p>",
                "smithy.api#required": {}
            }
        },
        "SignKey": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n          and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
          }
        },
        "com.amazonaws.licensemanager#IssuerDetails": {
          "type": "structure",
          "members": {
            "Name": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Issuer name.</p>"
              }
            },
            "SignKey": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n          and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
               }
            },
            "KeyFingerprint": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
          }
        },
        "com.amazonaws.licensemanager#License": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
              }
            },
            "LicenseName": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

          "smithy.api#documentation": "<p>License name.</p>"
            }
          },
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product name.</p>"
            }
          },
          "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product SKU.</p>"
            }
          },
          "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
              "smithy.api#documentation": "<p>License issuer.</p>"
            }
          },
          "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

          "smithy.api#documentation": "<p>Home Region of the license.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          },
          "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
              "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
            }
          },
          "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License beneficiary.</p>"
```

```
            }
          },
          "Entitlements": {

  "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
              "smithy.api#documentation": "<p>License entitlements.</p>"
            }
          },
          "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
          },
          "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>License metadata.</p>"
            }
          },
          "CreateTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>License
creation time.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
          "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
            }
          },
```

```
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
```

```
    },
    "ConsumedLicenses": {
      "target": "com.amazonaws.licensemanager#BoxLong",
      "traits": {
        "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
      }
    },
    "Status": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Status of the license configuration.</p>"
      }
    },
    "OwnerAccountId": {
      "target": "com.amazonaws.licensemanager#String",
      "traits": {
        "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

    }
    },
    "ConsumedLicenseSummaryList": {
      "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
      "traits": {
        "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
      }
    },
    "ManagedResourceSummaryList": {
      "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
      "traits": {
        "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
      }
    },
    "ProductInformationList": {
      "target": "com.amazonaws.licensemanager#ProductInformationList",
      "traits": {
        "smithy.api#documentation": "<p>Product information.</p>"
      }
    },
    "AutomatedDiscoveryInformation": {

      "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
      "traits": {
        "smithy.api#documentation": "<p>Automated discovery information.</p>"
      }
    }
  },
  "traits": {
    "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license
```

```
agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
        "type": "structure",
        "members": {
          "ResourceArn":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Type of server resource.</p>"
            }
          },
          "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource consuming licenses.</p>"
            }
          },
          "AssociationTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
            }
          },
          "AmiAssociationScope": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
      },
```

```
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
      }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
      "type": "enum",
      "members":
{
        "AVAILABLE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "AVAILABLE"
          }
        },
        "DISABLED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DISABLED"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
          }
        },
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits":
{
            "smithy.api#documentation": "<p>Type of resource.</p>"
          }
        },
        "ResourceStatus": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Status of the resource.</p>"
          }
        },
        "ResourceOwnerId": {
          "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
            }
        },
        "AssociationTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time when the license configuration was initially associated with the resource.</p>"
            }
        },

    "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license configuration.</p>"
      }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
      }
    },
    "com.amazonaws.licensemanager#LicenseConfigurations": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#LicenseConfiguration"
      }
    },
    "com.amazonaws.licensemanager#LicenseConversionContext": {

  "type": "structure",
      "members": {
        "UsageOperation": {
            "target": "com.amazonaws.licensemanager#UsageOperation",
            "traits": {
                "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you are converting your resource from.  For more information about which platforms correspond to which usage operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n        </p>"
            }
```

```
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
          }
        },
        "com.amazonaws.licensemanager#LicenseConversionTask": {
          "type": "structure",
          "members": {
            "LicenseConversionTaskId": {

         "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
              }
            },
            "ResourceArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n         conversion task.</p>"
              }
            },
            "SourceLicenseContext": {
              "target": "com.amazonaws.licensemanager#LicenseConversionContext",
              "traits": {
                "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
              }
            },
            "DestinationLicenseContext": {
              "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
              "traits": {
                "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
              "traits": {
                "smithy.api#documentation": "<p>The status of the conversion task.</p>"
              }
            },
            "StatusMessage": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
```

```
            }
          },
          "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
            }
          },
          "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
            }
          },
          "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTaskId": {
        "type": "string",
        "traits": {

         "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
          "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "IN_PROGRESS"
            }
          },
          "SUCCEEDED": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "SUCCEEDED"
            }
          },
          "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
      },
      "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
          "VCPU": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "vCPU"
            }
          },
          "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Instance"
            }
          },
          "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Core"
            }
          },
          "SOCKET": {
            "target": "smithy.api#Unit",
             "traits": {
              "smithy.api#enumValue": "Socket"
            }
          }
        }
```

```
},
"com.amazonaws.licensemanager#LicenseDeletionStatus": {
   "type": "enum",
   "members": {
      "PENDING_DELETE": {
         "target": "smithy.api#Unit",
         "traits": {
            "smithy.api#enumValue": "PENDING_DELETE"
         }
      },
      "DELETED": {
         "target": "smithy.api#Unit",
         "traits": {
            "smithy.api#enumValue": "DELETED"
         }
      }
   }
},
"com.amazonaws.licensemanager#LicenseList": {
   "type": "list",
   "member": {
      "target": "com.amazonaws.licensemanager#License"
   }
},
"com.amazonaws.licensemanager#LicenseOperationFailure": {

   "type": "structure",
   "members": {
      "ResourceArn": {
         "target": "com.amazonaws.licensemanager#String",
         "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
         }
      },
      "ResourceType": {
         "target": "com.amazonaws.licensemanager#ResourceType",
         "traits": {
            "smithy.api#documentation": "<p>Resource type.</p>"
         }
      },
      "ErrorMessage": {
         "target": "com.amazonaws.licensemanager#String",
         "traits": {
            "smithy.api#documentation": "<p>Error message.</p>"
         }
      },
      "FailureTime": {
         "target": "com.amazonaws.licensemanager#DateTime",
```

```
            "traits": {

        "smithy.api#documentation": "<p>Failure time.</p>"
            }
          },
          "OperationName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the operation.</p>"
            }
          },
          "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
            }
          },
          "OperationRequestedBy": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
            }
          },
          "MetadataList": {

            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Reserved.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseOperationFailureList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
        }
      },
      "com.amazonaws.licensemanager#LicenseSpecification": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",

                "smithy.api#required": {}
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecifications": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseSpecification"
        }
    },
    "com.amazonaws.licensemanager#LicenseStatus": {
        "type": "enum",
        "members": {
            "AVAILABLE": {
                "target": "smithy.api#Unit",

            "traits": {
                "smithy.api#enumValue": "AVAILABLE"
                }
            },
            "PENDING_AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                "smithy.api#enumValue": "PENDING_AVAILABLE"
                }
            },
            "DEACTIVATED": {
                "target": "smithy.api#Unit",
                "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
                }
            },
            "SUSPENDED": {
                "target": "smithy.api#Unit",
```

```
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

     "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseUsage": {
    "type": "structure",
    "members": {
        "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlement usages.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

    }
},
"com.amazonaws.licensemanager#LicenseUsageException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
```

```
            "aws.protocols#awsQueryError": {
               "code": "LicenseUsageFailure",
               "httpResponseCode": 412
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
         }
      },
      "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
         },
         "output": {

      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the specified license configuration.</p>\n         <p>Resource associations need not consume licenses from a license configuration. \n         For example, an AMI or a stopped instance might not consume a license (depending on \n the license rules).</p>"
         }
      },
      "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
         "type": "structure",
```

```
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results
to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
          "LicenseConfigurationAssociations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
            "traits": {
              "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
            }
          },
          "NextToken": {

 "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
```

```
"com.amazonaws.licensemanager#ListDistributedGrants": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
    "type": "structure",
    "members": {
        "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {

        "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n
  <li>\n            <p>\n              <code>GranteePrincipalARN</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>LicenseIssuerName</code>\n
        </p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
          "type": "structure",
          "members": {
            "Grants": {
              "target": "com.amazonaws.licensemanager#GrantList",

        "traits": {
                "smithy.api#documentation": "<p>Distributed grant details.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
```

```
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
        },
        "errors": [
          {

"target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
          "type": "structure",
          "members": {
            "LicenseOperationFailureList": {
              "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
              "traits": {
                "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#ListLicenseConfigurations": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
          },

      "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
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```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
 configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
 operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
 <code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
 <code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
 operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
 <p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
 enforcement is used. \n                Logical operators are <code>EQUALS</code> |
```

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<code>NOT_EQUALS</code>.</p>\n
   </li>\n          <li>\n          <p>\n          <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n          Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n          </li>\n          </ul>"
                }
              }
            },
            "traits": {
              "smithy.api#input": {}
            }
          },
          "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
            "type": "structure",
            "members": {
              "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                  "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
              },
              "NextToken": {
                "target": "com.amazonaws.licensemanager#String",

               "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
              }
            },
            "traits": {
              "smithy.api#output": {}
            }
          },
          "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
            "type": "operation",
            "input": {
              "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
            },
            "output": {
              "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
            },
            "errors": [
              {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
              },
              {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
              },
              {
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```
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
              },
              {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
              },
              {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
              }
            ],
            "traits": {
              "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
            }
          },
          "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
            "type": "structure",
            "members": {
              "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
              },
              "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {

        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
              },
              "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                  "smithy.api#documentation": "<p>\n        Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
                }
              }
            },
            "traits": {
              "smithy.api#input": {}
            }
          },
          "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
            "type": "structure",
            "members": {
              "LicenseConversionTasks": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
                "traits": {
                  "smithy.api#documentation": "<p>Information about the license configuration tasks for your
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account.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
```

```
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n      <ul>\n        <li>\n          <p>\n            <code>LicenseConfigurationArn</code>\n
</p>\n        </li>\n      </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits":
{
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
          "ReportGenerators": {
            "target": "com.amazonaws.licensemanager#ReportGeneratorList",
            "traits": {
              "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }

        }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                    "smithy.api#required": {}
                }
```

```
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {

    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
      "type": "structure",
      "members": {
        "LicenseSpecifications": {
          "target": "com.amazonaws.licensemanager#LicenseSpecifications",
          "traits": {
            "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
          }
        },
        "NextToken": {
           "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenseVersions": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
      },
      "errors": [
```

```
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
```

```
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
```

```
      "traits": {
        "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
      "type": "structure",
      "members": {
        "LicenseArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
          }
        },

     "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n
   <li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>Status</code>\n            </p>\n          </li>\n        </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token
 for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
      "type": "structure",
      "members": {
        "Licenses": {
          "target": "com.amazonaws.licensemanager#LicenseList",
          "traits": {
```

```
            "smithy.api#documentation": "<p>License details.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {

"smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrants": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while
```

```
specifying the\n         recipient as this Amazon Web Services account, your organization, or an organizational unit\n
    (OU) to which this member account belongs.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target":
 "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
              "smithy.api#required": {}
```

```
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>ParentArn</code>\n        </p>\n        </li>\n
<li>\n        <p>\n        <code>GranteePrincipalArn</code>\n        </p>\n        </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
              "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
```

```
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
      "type": "structure",
      "members": {
        "GrantArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>LicenseIssuerName</code>\n            </p>\n
</li>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n          <li>\n
<p>\n
        <code>GranterAccountId</code>\n            </p>\n          </li>\n        </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
      "type": "structure",
      "members": {
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",
          "traits": {
            "smithy.api#documentation": "<p>Received grant details.</p>"
          }
        },
```

```
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists received licenses.</p>"
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
```

```
{
        "type": "operation",
        "input": {
           "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
           "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
           {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
           },
           {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
           },
           {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
           {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
           },
           {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
           },
           {

     "target": "com.amazonaws.licensemanager#ServerInternalException"
           },
           {
              "target": "com.amazonaws.licensemanager#ValidationException"
           }
        ],
        "traits": {
           "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
     },
     "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
           "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                 "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n
           </p>\n          </li>\n        </ul>"
              }
           },
```

```
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
      "type": "structure",
      "members": {
        "Licenses": {
          "target": "com.amazonaws.licensemanager#GrantedLicenseList",
           "traits": {
            "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
      "type": "structure",
      "members": {
        "LicenseArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
          }
        },
```

```
        "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>Status</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>IssuerName</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Beneficiary</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Received license details.</p>"
            }
          },

          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
```

```
},
"com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
             "target": "com.amazonaws.licensemanager#FailedDependencyException"
        },
        {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
},
"com.amazonaws.licensemanager#ListResourceInventoryRequest": {
    "type": "structure",
    "members": {
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
             "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#InventoryFilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n are supported:</p>\n <ul>\n <li>\n <p>\n <code>account_id</code>
- The ID of the Amazon Web Services account that owns the resource.\n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
 </li>\n <li>\n <p>\n <code>application_name</code> - The name of the
application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n
 </li>\n <li>\n <p>\n <code>license_included</code> - The type of license included. \n
 Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values
are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-
server-web</code> | \n <code>windows-server-datacenter</code>.</p>\n </li>\n <li>\n
 <p>\n <code>platform</code> - The platform of the resource.\n Logical operators are
<code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n </li>\n <li>\n <p>\n
 <code>resource_id</code> - The ID of the resource. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n
 <code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical
operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> |
<code>NOT_EQUALS</code> (cross account).</p>\n </li>\n </ul>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
          "type": "structure",
          "members": {
            "ResourceInventoryList": {
              "target": "com.amazonaws.licensemanager#ResourceInventoryList",
              "traits": {
                "smithy.api#documentation": "<p>Information
 about the resources.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
```

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            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
```

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    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
      "type": "structure",
      "members": {
        "Tags": {
          "target": "com.amazonaws.licensemanager#TagList",
          "traits": {
            "smithy.api#documentation": "<p>Information about the tags.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListTokens": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListTokensRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListTokensResponse"
      },
      "errors":
[
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists your tokens.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
      "type": "structure",
      "members": {
```

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            "TokenIds": {
              "target": "com.amazonaws.licensemanager#StringList",
              "traits": {

                "smithy.api#documentation": "<p>Token IDs.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n          <li>\n          <p>\n          <code>LicenseArns</code>\n          </p>\n          </li>\n
</ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits": {
                "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListTokensResponse": {
          "type": "structure",
          "members": {
            "Tokens": {
              "target": "com.amazonaws.licensemanager#TokenList",
              "traits": {
                "smithy.api#documentation": "<p>Received token details.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
```

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        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
             {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying
license\n          consumption details by resource at a selected point in time. Use this action to audit the\n          current
license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
```

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                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#Filters",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>resourceArn</code> - The ARN of the license configuration resource.\n              Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n          </li>\n          <li>\n            <p>\n              <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n              Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n          </li>\n          <li>\n            <p>\n              <code>resourceAccount</code> - The ID of the account that owns the resource. \n              Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n          </li>\n        </ul>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
          "type": "structure",
          "members": {

            "LicenseConfigurationUsageList": {
              "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
              "traits": {
                "smithy.api#documentation": "<p>Information about the license configurations.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
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                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#Location": {
          "type": "string"
        },
        "com.amazonaws.licensemanager#Long": {
          "type": "long"
        },
        "com.amazonaws.licensemanager#ManagedResourceSummary": {
          "type": "structure",
          "members": {
            "ResourceType":
{
              "target": "com.amazonaws.licensemanager#ResourceType",
              "traits": {
                "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
              }
            },
            "AssociationCount": {
              "target": "com.amazonaws.licensemanager#BoxLong",
              "traits": {
                "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
          }
        },
        "com.amazonaws.licensemanager#ManagedResourceSummaryList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
          }
        },
        "com.amazonaws.licensemanager#MaxSize100": {

        "type": "integer",
          "traits": {
            "smithy.api#range": {
              "min": 1,
              "max": 100
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        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The value.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
    }
},
"com.amazonaws.licensemanager#MetadataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Metadata"
    }
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
    "type": "structure",
    "members": {
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            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement maximum count is reached.</p>",
             "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#Options": {
        "type": "structure",
        "members": {
            "ActivationOverrideBehavior": {
                "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
                "traits": {
                    "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of activating a grant.\n          Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter.</p>\n          <ul>\n             <li>\n                <p>As a license administrator, you can optionally specify an\n                   <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n             </li>\n             <li>\n                <p>As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n                   account in your organization.</p>\n             </li>\n             <li>\n                <p>As a grantee, if the grantor creating the distributed grant doesnt specify an\n                   <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n                   are activating the grant.</p>\n             </li>\n          </ul>\n          <dl>\n             <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n             <dd>\n                <p>Use this value to activate a grant without replacing any member accounts\n                   active grants for the same product.</p>\n             </dd>\n             <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n             <dd>\n                <p>Use this value to activate a grant and disable other active grants in any\n                   member accounts
 for the same product. This action will also replace their\n                   previously activated grants with this activated grant.</p>\n             </dd>\n          </dl>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant, such as activation\n          override behavior. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#OrganizationConfiguration": {
        "type": "structure",
        "members": {
            "EnableIntegration": {
                "target": "com.amazonaws.licensemanager#Boolean",
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            "traits": {
              "smithy.api#default": false,
              "smithy.api#documentation":
"<p>Enables Organizations integration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
      },
      "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 1
          }
        }
      },
      "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductInformationFilterList": {
            "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
            "traits": {
              "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n          <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n          <p>The following filters and are supported when
the resource type \n          is <code>SSM_MANAGED</code>:</p>\n
          <ul>\n            <li>\n              <p>\n                <code>Application Name</code> - The name of the
application.\n                Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>Application Publisher</code> - The publisher of the application.\n                Logical
```

operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n \n ",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": " Describes product information for a license configuration. "
      }
    },
    "com.amazonaws.licensemanager#ProductInformationFilter": {
      "type": "structure",
      "members": {
        "ProductInformationFilterName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": " Filter name. ",
            "smithy.api#required": {}
          }
        },
        "ProductInformationFilterValue": {
          "target": "com.amazonaws.licensemanager#StringList",

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      "traits": {
            "smithy.api#documentation": "<p>Filter value.</p>"
          }
        },
        "ProductInformationFilterComparator": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Logical operator.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
      }
    },
    "com.amazonaws.licensemanager#ProductInformationFilterList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
      }
    },
    "com.amazonaws.licensemanager#ProductInformationList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
      }
    },
    "com.amazonaws.licensemanager#ProvisionalConfiguration": {
      "type": "structure",
      "members": {
        "MaxTimeToLiveInMinutes": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
      }
    },
    "com.amazonaws.licensemanager#RateLimitExceededException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
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            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "RateLimitExceeded",
                "httpResponseCode": 429
            },
            "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 429
        }
    },
    "com.amazonaws.licensemanager#ReceivedMetadata": {
        "type": "structure",
        "members": {
            "ReceivedStatus": {
                "target": "com.amazonaws.licensemanager#ReceivedStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Received status.</p>"
                }
            },
            "ReceivedStatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Received
 status reason.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReceivedStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
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            },
            "PENDING_ACCEPT": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue":
"PENDING_ACCEPT"
               }
            },
            "REJECTED": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "REJECTED"
               }
            },
            "ACTIVE": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "ACTIVE"
               }
            },
            "FAILED_WORKFLOW": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "FAILED_WORKFLOW"
               }
            },
            "DELETED": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "DELETED"
               }
            },
            "DISABLED": {
               "target": "smithy.api#Unit",
                "traits": {
                  "smithy.api#enumValue": "DISABLED"
               }
            },
            "WORKFLOW_COMPLETED": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "WORKFLOW_COMPLETED"
               }
            }
         }
      },
      "com.amazonaws.licensemanager#RedirectException": {
         "type": "structure",
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      "members": {
        "Location": {
          "target": "com.amazonaws.licensemanager#Location",
          "traits": {
            "smithy.api#httpHeader": "Location"
          }
        },
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
         "smithy.api#error": "client",
        "smithy.api#httpError": 308
      }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#RejectGrantResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
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        ],
        "traits": {
          "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
      },
      "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}

}
      },
      "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#RenewType":
```

```
{
        "type": "enum",
        "members": {
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Weekly"
            }
          },
          "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Monthly"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ReportContext": {
        "type": "structure",
        "members": {
          "licenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {

        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this
generator reports on.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
        }
      },
      "com.amazonaws.licensemanager#ReportFrequency": {
        "type": "structure",
        "members": {
          "value": {
            "target": "com.amazonaws.licensemanager#Integer",
            "traits": {
              "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated.  \n        The only supported value is <code>1</code>.</p>"
```

```
            }
          },
          "period": {
            "target": "com.amazonaws.licensemanager#ReportFrequencyType",

           "traits": {
              "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
or monthly.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
        }
      },
      "com.amazonaws.licensemanager#ReportFrequencyType": {
        "type": "enum",
        "members": {
          "DAY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DAY"
            }
          },
          "WEEK": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "WEEK"
            }
          },
          "MONTH": {
            "target": "smithy.api#Unit",
            "traits":
{
              "smithy.api#enumValue": "MONTH"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
          "ReportGeneratorName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the report generator.</p>"
            }
          },
```

```
            "ReportType": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
                "traits": {
                    "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
                }
            },
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
                }
            },
            "LastRunStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
                }
            },
            "LastRunFailureReason":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
                }
            },
            "LastReportGenerationTime": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
                }
            },
            "ReportCreatorAccount": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
```

```
generator.</p>"
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",

        "traits": {
                    "smithy.api#documentation": "<p>Description of the report generator.</p>"
                }
            },
            "S3Location": {
                "target": "com.amazonaws.licensemanager#S3Location",
                "traits": {
                    "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Time the report was created.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
                }

      }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
        }
      },
      "com.amazonaws.licensemanager#ReportGeneratorList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ReportGenerator"
        }
      },
      "com.amazonaws.licensemanager#ReportGeneratorName": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
```

```
        }
      },
      "com.amazonaws.licensemanager#ReportType": {
        "type": "enum",
        "members": {
          "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
            }

      },
          "LICENSE_CONFIGURATION_USAGE_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "LicenseConfigurationUsageReport"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ReportTypeList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#ReportType"
        }
      },
      "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
          "ResourceId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the resource.</p>"
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits":
{
              "smithy.api#documentation": "<p>Type of resource.</p>"
            }
          },
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
          },
```

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        "Platform": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Platform of the resource.</p>"
          }
        },
        "PlatformVersion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
          }
        },
        "ResourceOwningAccountId":
{
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about a resource.</p>"
      }
    },
    "com.amazonaws.licensemanager#ResourceInventoryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ResourceInventory"
      }
    },
    "com.amazonaws.licensemanager#ResourceLimitExceededException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "ResourceLimitExceeded",

           "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
```

```
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_INSTANCE"
            }
        },
        "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_HOST"
            }
        },
        "EC2_AMI": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EC2_AMI"
            }
        },
        "RDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "RDS"
            }
        },
        "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
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                    "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#S3Location": {
        "type": "structure",
        "members": {
            "bucket": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
                }
            },
            "keyPrefix": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
        }
    },
    "com.amazonaws.licensemanager#ServerInternalException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InternalError",
                "httpResponseCode": 500
            },
            "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
            "smithy.api#error": "server",
            "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 4096
```

```
            }
          }
        },
        "com.amazonaws.licensemanager#StatusReasonMessage": {
          "type": "string",
          "traits":
{
            "smithy.api#length": {
              "min": 0,
              "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
          }
        },
        "com.amazonaws.licensemanager#String": {
          "type": "string"
        },
        "com.amazonaws.licensemanager#StringList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#String"
          }
        },
        "com.amazonaws.licensemanager#Tag": {
          "type": "structure",
          "members": {
            "Key": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Tag key.</p>"
              }
            },
            "Value": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation":
"<p>Tag value.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
          }
        },
        "com.amazonaws.licensemanager#TagKeyList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#String"
```

```
        }
      },
      "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Tag"
        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
          {
            "target":
 "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits":
 {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
              "smithy.api#required": {}
```

```
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>One or more tags.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
          "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token ID.</p>"
            }
          },
          "TokenType": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
            }
          },
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "ExpirationTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
```

```
format.</p>"
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller.</p>"
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
                }
            }
        },
        "traits": {

          "smithy.api#documentation": "<p>Describes a token.</p>"
        }
    },
    "com.amazonaws.licensemanager#TokenList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#TokenData"
        }
    },
    "com.amazonaws.licensemanager#TokenString": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 4096
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#TokenType": {
        "type": "enum",
        "members": {
```

```
            "REFRESH_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REFRESH_TOKEN"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                     "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanager#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
        },
        "output": {

 "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseConfigurationStatus": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
                "traits": {
                    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
    configuration is licenseAffinityToHost.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
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```
                "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
              }
            },
            "LicenseCountHardLimit": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
              }
            },
            "Name": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>New name
 of the license configuration.</p>"
              }
            },
            "Description": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>New description of the license configuration.</p>"
              }
            },
            "ProductInformationList": {
              "target": "com.amazonaws.licensemanager#ProductInformationList",
              "traits": {
                "smithy.api#documentation": "<p>New product information.</p>"
              }
            },
            "DisassociateWhenNotFound": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
              }
            }
          },
          "traits":
 {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
```

```
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
      }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
      "type": "structure",
      "members": {
        "LicenseManagerReportGeneratorArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to
```

update. ",
"smithy.api#required": {}
}
},
"ReportGeneratorName": {
"target": "com.amazonaws.licensemanager#ReportGeneratorName",
"traits": {
"smithy.api#documentation": " Name of the report generator. ",
"smithy.api#required": {}
}
},
"Type": {
"target": "com.amazonaws.licensemanager#ReportTypeList",
"traits": {
"smithy.api#documentation":
" Type of reports to generate. The following report types are supported: \n \n \n
License configuration report - Reports the number and details of consumed licenses for a license
configuration. \n \n \n Resource report - Reports the tracked licenses and
resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " The report context. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits":
{
"smithy.api#documentation": " Frequency by which reports are generated. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

```
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
              "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
              "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified Amazon Web Services resource.</p>\n          <p>You can update the license specifications of AMIs, instances, and hosts.\n          You cannot update the license specifications for launch templates and CloudFormation templates, \n as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where
the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used
for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account
discovery.</p>"
```

```
            }
          },
          "EnableCrossAccountsDiscovery": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"

       }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#UsageOperation": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          }
        }
      },
      "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

       "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      }
    }
  }
}
```


CheckoutLicense

Initialize stack step

spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.107 github.com/aws/aws-sdk-go-v2/service/internal/endpoint-discovery 1.10.15

1.107.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter
```

```
 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
```

```
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
name: License Scan

on: [pull_request]

jobs:
```

```
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
       run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
     # compare
     - name: License test
       run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses
are the same. Success."; exit 0; fi
```

DeleteLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger

```
 spanInitializeEnd
Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 Retry
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string
```

```
// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus

// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
```

```
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err
 = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
```

```
 if err
 = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
```

```
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
```

```
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
```

```
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
```

```
 ServiceID:     ServiceID,
 OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string
```

```
 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License
```

```
 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
```

Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS

ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody

```
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string
```

```
 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
```

```
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
```

```
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
```

```
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
```

```
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}
```

```
func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
     "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
        "type": "integer"
     },
     "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
        "type": "long"
     },
     "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
        "type": "operation",
        "input": {
           "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
        },
        "output": {
           "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
        },
        "errors": [
           {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
           },
           {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
           },

     {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
           },
           {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
           }
        ],
        "traits": {
           "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own
License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
           "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/DeregisterSubscriptionProvider"
           },
```

```
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider
resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                 }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
```

```
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
```

```
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

           "traits": {
              "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
             }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetServiceSettings"

          },
          "smithy.api#idempotent": {}
        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
      "type": "structure",
      "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
      "type": "structure",
      "members": {
        "LinuxSubscriptionsDiscovery": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
          "traits": {
            "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
          }
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
          "traits": {
            "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
          }
        },
        "StatusMessage": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
          "traits": {
            "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
          }
        },
        "HomeRegions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
           "traits": {
            "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
      "type": "structure",
      "members": {
        "AmiId": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
          },
          "Region": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
          },
          "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
              "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
          },
          "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-
operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The time in which the last discovery updated the instance
details.</p>"
            }
        },
        "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
        },
        "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The operating system software version that runs on your
instance.</p>"
            }
        },
        "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
        },
        "SubscriptionProviderUpdateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
            }
        },
        "DualSubscription": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
            }
        },
        "RegisteredWithSubscriptionProvider": {
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                "target": "smithy.api#String",
                "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
                }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
          "type": "service",
          "version": "2018-05-10",
          "operations": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
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```
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
  ],
  "traits": {
    "aws.api#service": {
      "sdkId": "License Manager Linux Subscriptions",
      "arnNamespace": "license-manager-linux-subscriptions",
      "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
      "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
      "additionalAllowedHeaders": [
        "*",
        "content-type",
        "x-amz-content-sha256",
        "x-amz-user-agent",
        "x-amzn-platform-id",
        "x-amzn-trace-id"
      ],
      "additionalExposedHeaders": [
        "x-amzn-errortype",
        "x-amzn-requestid",
        "x-amzn-trace-id"
      ]
    },
    "smithy.api#documentation": "<p>With License Manager,
```

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you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager Linux Subscriptions",
            "smithy.rules#endpointRuleSet": {
              "version": "1.0",
              "parameters": {
                "Region": {
                  "builtIn": "AWS::Region",
                  "required": false,
                  "documentation": "The AWS region used to dispatch the request.",
                  "type": "String"
                },
                "UseDualStack": {
                  "builtIn": "AWS::UseDualStack",
                  "required": true,
                  "default": false,
                  "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
                   "type": "Boolean"
                },
                "UseFIPS": {
                  "builtIn": "AWS::UseFIPS",
                  "required": true,
                  "default": false,
                  "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                  "type": "Boolean"
                },
                "Endpoint": {
                  "builtIn": "SDK::Endpoint",
                  "required": false,
                  "documentation": "Override the endpoint used to send this request",
                  "type": "String"
                }
              },
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "isSet",
                      "argv": [
                        {
                          "ref": "Endpoint"
                        }
                      ]
                    }
                  ],
                  "rules": [
                    {
```

```
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true
                        ]
                    }

            ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
```

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    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {

                                    "ref": "UseFIPS"
                                        },
                                        true
                                    ]
                                },
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
```

```
                {
                  "ref": "UseDualStack"
                },
                true
              ]
            }

  ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          true,
                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"

            },
                                "supportsFIPS"
                              ]
                            }
                          ]
                        },
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
                              "argv": [

                               {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                              ]
                            }
                          ]
                        }
                      ],
                      "rules": [
                        {
                          "conditions": [],
```

```
      "rules": [
                                        {
                                          "conditions": [],
                                          "endpoint": {
                                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                          },
                                          "type": "endpoint"
                                        }
                                      ],

                            "type": "tree"
                                    }
                                  ],
                                  "type": "tree"
                                },
                                {
                                  "conditions": [],
                                  "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                                  "type": "error"
                                }
                              ],
                              "type": "tree"
                            },
                            {

          "conditions": [
                                {
                                  "fn": "booleanEquals",
                                  "argv": [
                                    {
                                      "ref": "UseFIPS"
                                    },
                                    true
                                  ]
                                }
                              ],
                              "rules": [
                                {
                                  "conditions": [
                                    {

                        "fn": "booleanEquals",
                                        "argv": [
                                          {
```

```
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
                                true

                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled
but this partition does not support FIPS",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
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```
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true

                        ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            true,
                                            {
                                                "fn": "getAttr",
                                                "argv": [
                                                    {

                                                    "ref": "PartitionResult"
                                                    },
                                                    "supportsDualStack"
                                                ]
                                            }
                                        ]
                                    }
                                ],
                                "rules": [
                                    {
                                        "conditions": [],
                                        "rules": [

        {
                                                "conditions": [],
                                                "endpoint": {
                                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                    "properties": {},
                                                    "headers": {}
                                                },
                                                "type": "endpoint"
                                            }
                                        ],
                                        "type": "tree"

                        }
                                ],
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```
                                    "type": "tree"
                                },
                                {
                                    "conditions": [],
                                    "error": "DualStack is enabled but this partition does not support DualStack",
                                    "type": "error"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ],
    "type": "tree"
}
]
},
"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
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```
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {

         "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
              }

    },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
```

```
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
           },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
```

```
                "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
              }

           },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": false,
              "UseDualStack": true
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```
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {

    "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
```

```
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS":
false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
             }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
```

```
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {

      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }

  },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
```

```
            },
            {

              "documentation": "For custom endpoint with fips enabled and dualstack disabled",
              "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips disabled and dualstack enabled",
              "expect": {
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
              },
              "params": {

"Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "Missing region",
              "expect": {
                "error": "Invalid Configuration: Missing Region"
              }
            }
          ],
          "version": "1.0"
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled LinuxSubscriptionsDiscovery"
```

```
      },
            {
               "name": "Disabled",
               "value": "Disabled",
               "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
         ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
      "type": "structure",
      "members": {
        "SourceRegions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "OrganizationIntegration": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
          "traits": {
            "smithy.api#documentation":
"<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },

  {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>.</p>\n          <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto streamline results:</p>\n          <ul>\n             <li>\n                <p>\n                   <code>AccountID</code>\n                </p>\n             </li>\n             <li>\n                <p>\n                   <code>AmiID</code>\n                </p>\n             </li>\n             <li>\n                <p>\n                   <code>DualSubscription</code>\n                </p>\n             </li>\n             <li>\n                <p>\n                   <code>InstanceID</code>\n                </p>\n             </li>\n             <li>\n                <p>\n                   <code>InstanceType</code>\n                </p>\n             </li>\n             <li>\n                <p>\n                   <code>ProductCode</code>\n                </p>\n             </li>\n             <li>\n                <p>\n                   <code>Region</code>\n                </p>\n             </li>\n             <li>\n                <p>\n                   <code>Status</code>\n                </p>\n             </li>\n             <li>\n                <p>\n                   <code>UsageOperation</code>\n                </p>\n             </li>\n          </ul>\n          <p>For each filter, you can use one of the following <code>Operator</code>\n          values to \n  \t\tdefine the behavior of the filter:</p>\n          <ul>\n             <li>\n                <p>\n                   <code>contains</code>\n                </p>\n             </li>\n             <li>\n                <p>\n                   <code>equals</code>\n                </p>\n             </li>\n             <li>\n                <p>\n                   <code>Notequal</code>\n                </p>\n             </li>\n          </ul>"
```

```
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to
 start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
 parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {

        "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
 isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
 next request to retrieve \n\tadditional objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
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```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",

    "items": "Subscriptions"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
          "type": "structure",
          "members": {
            "Filters": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n          <p>The valid names for this filter are:</p>\n          <ul>\n <li>\n              <p>\n                <code>Subscription</code>\n              </p>\n            </li>\n          </ul>\n <p>The
```

```
 valid Operators for this filter are:</p>\n        <ul>\n          <li>\n            <p>\n
<code>contains</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>equals</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                "smithy.api#length": {
                  "min": 1,
                  "max": 16384
                }
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
          "type": "structure",
          "members": {
            "Subscriptions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
              "traits": {
                "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
               "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
              }
            }
          }
        },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
      "type": "operation",
      "input": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
      },
      "output": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration
resources for your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/ListRegisteredSubscriptionProviders"
        },
        "smithy.api#idempotent": {},
        "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
          "pageSize": "MaxResults",
          "items": "RegisteredSubscriptionProviders"
        }
      }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSources": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
          "traits": {
            "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
```

```
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }

  },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
          "RegisteredSubscriptionProviders": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
            }
          },

           "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
      },
      "errors": [
        {

     "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon
Web Services resource.</p>",
        "smithy.api#http": {
          "method": "GET",
          "uri": "/tags/{resourceArn}"
        },
        "smithy.api#readonly": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
      "type": "structure",
      "members": {
        "resourceArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
           "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
      "type": "structure",
      "members": {
        "tags": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "EQUAL",
            "value": "Equal",
            "documentation": "Equal operator"
          },
          {
            "name": "NOT_EQUAL",
            "value": "NotEqual",
            "documentation": "Not equal operator"
          },
          {
            "name": "CONTAINS",
            "value": "Contains",
            "documentation": "Contains operator"
          }
        ],
        "smithy.api#length": {
          "min": 1,
          "max": 20
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
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```
                "documentation": "Enabled OrganizationIntegration"
            },
            {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
            }
        ]
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
     },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/RegisterSubscriptionProvider"

     },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
```

```
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
              "smithy.api#required": {}
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the
 Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation":
 "<p>The Linux subscription provider that you registered.</p>"
            }
          },
          "SubscriptionProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderStatus": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits":
```

```
{
                "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
              }
            },
            "LastSuccessfulDataRetrievalTime": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

    }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
          "type": "string",
```

```
    "traits": {
      "smithy.api#enum": [
        {
          "name": "InProgress",
          "value": "InProgress",
          "documentation": "InProgress status"
        },
        {
          "name": "Completed",
          "value": "Completed",
          "documentation": "Completed status"
        },
        {
          "name": "Successful",
          "value": "Successful",
          "documentation": "Successful status"
        },
        {
          "name": "Failed",
          "value": "Failed",
          "documentation": "Failed status"
        }
      ]
    }
  },

 "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
      "target": "smithy.api#String",
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        }
      }
    },
    "traits": {
      "smithy.api#length": {
        "min": 1,
        "max": 100
      },
      "smithy.api#uniqueItems": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
```

```
            "target": "smithy.api#String"
          },
          "value": {
            "target": "smithy.api#String"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
          "type": "structure",
          "members": {
            "Name":
{
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the subscription.</p>"
              }
            },
            "Type": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
              }
            },
            "InstanceCount": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
              "traits": {
                "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [

{
                "name": "RedHat",
                "value": "RedHat",
                "documentation": "RedHat subscription provider namespace"
              }
            ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "ACTIVE",
              "value": "ACTIVE",
              "documentation": "ACTIVE status"
            },
            {
              "name": "INVALID",
              "value": "INVALID",

 "documentation": "INVALID status"
            },
            {
              "name": "PENDING",
              "value": "PENDING",
              "documentation": "PENDING status"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
```

```
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
{
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
              "smithy.api#httpLabel": {},
```

```
                "smithy.api#required": {}
            }
          },
          "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }

      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
```

```
            "smithy.api#documentation":
 "<p>The request was denied due to request throttling.</p>",
            "smithy.api#error": "client"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
              "method": "DELETE",
              "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
          "type": "structure",
          "members": {
            "resourceArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            },
            "tagKeys": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
              "traits": {
```

```
          "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                "smithy.api#httpQuery": "tagKeys",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

         },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
          }
        },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
      "type": "structure",
      "members": {
        "LinuxSubscriptionsDiscovery": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
          "traits": {
            "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
            "smithy.api#required": {}
          }
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
          "traits": {
            "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
            "smithy.api#required": {}
          }
        },
        "AllowUpdate": {
          "target":
 "smithy.api#Boolean",
          "traits": {
            "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
      "type": "structure",
      "members": {
        "LinuxSubscriptionsDiscovery": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
          "traits": {
            "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
          }
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
           "traits": {
            "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>"
          }
        },
        "Status": {
```

```
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }

        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string
```

```
 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
```

```
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
```

```
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack);
```

```
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
```

Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper

RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
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{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": " You don't have sufficient access to perform this action. ",
        "smithy.api#error": "client"
      }
    },

```
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
      "type": "structure",
      "members": {
        "DomainName": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
          }
        },
        "DomainIpv4List": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
          "traits": {
            "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
            "smithy.api#length": {
              "min": 1,
              "max": 2
```

```
                }
              }
            },
            "DomainCredentialsProvider": {
              "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
              "traits": {
                "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
              }
            },
            "DomainNetworkSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "SELF_MANAGED",
                "value": "SELF_MANAGED",
                "documentation": "SELF_MANAGED type of Active Directory"
              },
              {
                "name": "AWS_MANAGED",
                "value": "AWS_MANAGED",
                "documentation": "AWS_MANAGED type of Active Directory"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Arn": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
          }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n          <note>\n             <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n          </note>",
            "smithy.api#http":
{
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
            "smithy.api#required": {}
          }
        },
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The identity provider for the user.</p>",
            "smithy.api#required": {}
          }
        },
        "Domain": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
          }
        },
        "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
          }
        }
      },
      "traits": {

    "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
      "type": "structure",
      "members": {
```

```
            "InstanceUserSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
             }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

          {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
```

```
                "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
          "type": "structure",
          "members": {
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
              }
            },
            "LicenseServerEndpointArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
          "type": "union",
          "members": {
            "SecretsManagerCredentialsProvider":
{
              "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
              "traits": {
                "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
          }
        },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
      ],
      "traits": {
        "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/license-server/DeleteLicenseServerEndpoint"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
      "type": "structure",
      "members": {
        "LicenseServerEndpointArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
```

```
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                "smithy.api#required": {}
              }
            },
             "ServerType": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
              "traits": {
                "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
          "type": "structure",
          "members": {
            "LicenseServerEndpoint": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
              "traits": {
                "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
              }
            }
          },
           "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity provider to deregister.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}

    }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
```

```
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

      }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
               }
            },
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
```

```
                "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
              }
            },
            "InstanceUserArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummary":
{
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
          "type": "structure",
          "members": {
            "Subnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                "smithy.api#length": {
```

```
                    "min": 1
                },

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
            },
            "Operation": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
                }
            },
            "Value": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
```

```
        "members": {
            "ActiveDirectoryIdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
                 "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
             "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the
registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC
endpoints.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
```

```
            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
               }
            },
            "FailureMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
         "type": "list",
         "member": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
         "type": "structure",
         "members": {
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                  "smithy.api#required": {}
               }
            },
            "Status": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                  "smithy.api#required": {}
               }
            },
            "Products": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
                "traits": {
                  "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                  "smithy.api#required": {}
               }
```

```
            },
            "LastStatusCheckDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The date of the last status check.</p>"
               }
            },
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                  "smithy.api#required": {}
               }
            },
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                  "smithy.api#required": {}
               }
            },

      "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
```

```
\n\t\t\tabout the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
                 }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
                }
            },
            "AssociationDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
                }
            },
            "DisassociationDate": {
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
        }
```

```
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
   "type": "list",
   "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
   }
},
"com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
   "type": "structure",
   "members": {
      "message": {
         "target": "smithy.api#String"
      }
   },
   "traits": {
      "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
       "smithy.api#error": "server",
      "smithy.api#httpError": 500
   }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
   "type": "string",
   "traits": {
      "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
   }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
   "type": "list",
   "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
   }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
   "type": "service",
   "version": "2018-05-10",
   "operations": [
      {
         "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
      },
      {
         "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
       },
      {
         "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
      },
      {
         "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
      },
```

```
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
```

```
            "name": "license-manager-user-subscriptions"
          },
          "aws.protocols#restJson1": {},
          "smithy.api#cors": {
            "additionalAllowedHeaders": [
              "*",
              "content-type",
              "x-amz-content-sha256",
              "x-amz-user-agent",
              "x-amzn-platform-id",
              "x-amzn-trace-id",
              "content-length",

        "x-api-key",
              "authorization",
              "x-amz-date",
              "x-amz-security-token",
              "Access-Control-Allow-Headers",
              "Access-Control-Allow-Methods",
              "Access-Control-Allow-Origin"
            ],
            "additionalExposedHeaders": [
              "x-amzn-errortype",
              "x-amzn-requestid",
              "x-amzn-trace-id"
            ]
          },
          "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
          "smithy.api#title": "AWS License Manager User Subscriptions",
          "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
              "Region":
{
                "builtIn": "AWS::Region",
                "required": false,
                "documentation": "The AWS region used to dispatch the request.",
                "type": "String"
              },
              "UseDualStack": {
                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                "type": "Boolean"
              },
```

```
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will
return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseFIPS"
                        },
                        true
                      ]
                    }
                  ],
                  "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                  "type": "error"
                },
                {
                  "conditions": [
                    {
```

```
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                    },

"properties": {},
                        "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Region"
                    }
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "aws.partition",

                        "argv": [
                            {
                                "ref": "Region"
                            }
```

```
                ],
                "assign": "PartitionResult"
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
```

true

```
                    ]
                  },
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
                    ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
```

"fn": "booleanEquals",

```
                        "argv": [
                          true,
                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },
                              "supportsFIPS"
                            ]
                          }
                        ]
                      },
```

```
                {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }

                ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                      "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
                  }

    ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
              }
            ],
            "type": "tree"
          },
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
```

```
{
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "fn": "getAttr",
                                            "argv": [

                                {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsFIPS"
                                        ]
                                    },
                                    true
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {

                        "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "FIPS is enabled but this partition does not support FIPS",
                        "type": "error"

  }
                    ],
```

```
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {

        "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        true,
                                        {
                                            "fn": "getAttr",
                                            "argv": [
                                                {
                                                    "ref": "PartitionResult"
                                                },
                                                "supportsDualStack"
                                            ]

         }
                                    ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
```

```
                ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "DualStack is enabled but this partition does not support DualStack",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "endpoint": {
                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

            "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
      }
    ],
    "type": "tree"
  },
  {
    "conditions": [],
    "error": "Invalid Configuration: Missing Region",
    "type": "error"
  }
 ]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect":
{
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
```

```
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",

      "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
```

```
                "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS":
true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint":
{
                "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
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            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
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```
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false

    }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
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                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
                }

            },
              "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
              },
              "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack
disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
                }
              },
              "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "error": "DualStack is enabled but this partition does not support DualStack"
              },
              "params": {
                "Region": "us-isob-east-1",

  "UseFIPS": false,
                "UseDualStack": true
              }
            },
```

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    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {

     "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack":
false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
```

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                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                  "error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "Missing region",
                "expect": {
                  "error": "Invalid Configuration: Missing Region"
                }
              }
            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
        "type": "structure",
        "members": {
          "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
               "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
          },
          "HealthStatus": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
            "traits": {
              "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
          },
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            "Ipv4Address": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Information
 about a Remote Desktop Services (RDS) license server.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
         "type": "structure",
         "members": {
            "IdentityProviderArn": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
               }
            },
            "ServerType": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
               "traits": {
                  "smithy.api#documentation": "<p>The type of license server.</p>"
               }
            },
            "ServerEndpoint": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

   "traits": {
                  "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
               }
            },
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
               }
            },
            "LicenseServerEndpointId": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
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            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits":
{
              "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
            }
          },
          "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
            }
          },
          "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
          },

         "CreationTime": {
            "target": "smithy.api#Timestamp",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
      },
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    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

"type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "PROVISIONING",
            "value": "PROVISIONING",
            "documentation": ""
          },
          {
            "name": "PROVISIONING_FAILED",
            "value": "PROVISIONING_FAILED",
            "documentation": ""
          },
          {
            "name": "PROVISIONED",
            "value": "PROVISIONED",
            "documentation": ""
          },
          {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""

          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
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                {
                    "name": "UNHEALTHY",
                    "value": "UNHEALTHY",
                    "documentation": ""
                },
                {
                    "name": "NOT_APPLICABLE",
                    "value": "NOT_APPLICABLE",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
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        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {

            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
             },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
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            "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single request.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n <ul>\n <li>\n <p>Product</p>\n </li>\n <li>\n <p>DirectoryId</p>\n </li>\n </ul>"
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
    "type": "structure",
    "members": {
        "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

            "traits": {
                "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
                "smithy.api#required": {}
            }
        },
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
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    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
    "type": "operation",
     "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },

{
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
        }
    }
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    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
      "type": "structure",
      "members":
{
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n
      <li>\n            <p>InstanceId</p>\n          </li>\n        </ul>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
      "type": "structure",
      "members": {
        "InstanceSummaries": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next
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token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
},
"errors": [
{
"target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
},
{
"target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
}
],
"traits": {
"smithy.api#documentation": " List the Remote Desktop Services (RDS) License Server endpoints
",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/license-server/ListLicenseServerEndpoints"
},

"smithy.api#paginated": {
"inputToken": "NextToken",

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            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "LicenseServerEndpoints"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>IdentityProviderArn</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
            }
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            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
         "type":
 "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
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provider.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "ProductUserSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
{
         "type": "structure",
         "members": {
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n               <p>Status</p>\n            </li>\n            <li>\n               <p>Username</p>\n
</li>\n            <li>\n               <p>Domain</p>\n            </li>\n         </ul>"
               }
```

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            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating.
 This is the nextToken \n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
         "type": "structure",
         "members": {
            "ProductUserSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service
 hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

            }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
```

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},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
         }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListUserAssociations"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceUserSummaries"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
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        "type": "structure",
        "members": {
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance, which
 provides user-based subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {

      "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n        <ul>\n
   <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n          </li>\n
<li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
 \n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
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            "InstanceUserSummaries": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
              "traits": {
                 "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                 "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
          "type": "structure",
          "members": {
            "Username":
 {
              "target": "smithy.api#String",
              "traits": {
                 "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
                 "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                 "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                 "smithy.api#required": {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                 "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                 "smithy.api#required": {}
              }
            },
             "Status": {
              "target": "smithy.api#String",
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            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
            }
          },
          "SubscriptionStartDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
          },
          "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
          "RdsSalCredentialsProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {

   "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits":
{
                    "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
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            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation":
"<p>Metadata that describes the results of an identity provider operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",

    "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
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            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
              "smithy.api#length": {
                "min": 1
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
          "smithy.api#length": {

           "min": 5,
            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
             "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
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            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {

"target": "smithy.api#String"
            }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
              "smithy.api#length": {
                "min": 1
              },
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
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            "traits": {
                "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

          },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity
```

provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http": {
"code": 200,
"method": "POST",
"uri": "/user/StartProductSubscription"
}

}
},
"com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider of the user. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " An object that specifies details for the identity provider. ",
"smithy.api#required": {}
}
},
"Product": {
"target": "smithy.api#String",
"traits": {

"smithy.api#documentation": " The name of the user-based subscription product. \n Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user for whom to start the product \n\t\t\tsubscription. "
}
},

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            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
              }

  }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

    },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

    },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
                }
            },
            "IdentityProvider": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
                }
            },
```

```
            "ProductUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"

               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
         "type": "structure",
         "members": {
            "ProductUserSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
                  "smithy.api#required": {}
               }

   }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StringList": {
         "type": "list",
         "member": {
            "target": "smithy.api#String"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
         }
      },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {

"min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation":
"<p>Adds tags to a resource.</p>",
        "smithy.api#http": {
          "method": "PUT",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
          "traits": {
            "smithy.api#documentation":
 "<p>The tags to apply to the specified resource.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
      "type": "map",
      "key": {
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {

             "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
```

```
to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

            }
               },
               "TagKeys": {
                  "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                  "traits": {
                     "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                     "smithy.api#httpQuery": "tagKeys",
                     "smithy.api#required": {}
                  }
               }
            },
            "traits": {
               "smithy.api#input": {}
            }
         },
         "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
            "type": "structure",
            "members": {},
            "traits": {
               "smithy.api#output": {}
            }
         },
         "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
            "type": "operation",
            "input": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
             },
            "output": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
            },
            "errors": [
               {
                  "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
               },
               {
                  "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
               },
               {
                  "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
               },
               {
                  "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
               }
            ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {

       "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },

            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to update.</p>"
                }
            },
            "UpdateSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
                    "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n <ul>\n            <li>\n                <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n       <li>\n                <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n <li>\n                <p>Security
 group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            }
        },
```

```
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
      "type": "structure",
      "members": {
        "IdentityProviderSummary": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
          "traits": {
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
      "type": "structure",
      "members": {
        "AddSubnets": {

       "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
            "smithy.api#required": {}
          }
        },
        "RemoveSubnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
            "smithy.api#required": {}
          }
        },
        "SecurityGroupId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
          "traits": {
            "smithy.api#documentation": "<p>A security group ID that
 allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for
activation servers.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
```

settings such as\n\t\t\tthe subnets to provision VPC endpoints. "
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": " A parameter is not valid. ",
          "smithy.api#error": "client"
        }
      }
    }
}

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ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step

```
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 Retry
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
```

```
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
```

```
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
```

```
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
```

```
}
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpResponseCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
      },
      {
        "id": "Service",
        "namespace": "*"
      }
    ]
  },
  "shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
      "type": "service",
      "version": "2018-08-01",
      "operations": [
        {
          "target": "com.amazonaws.licensemanager#AcceptGrant"
        },

 {
          "target": "com.amazonaws.licensemanager#CheckInLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
        },
        {
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      "smithy.api#title": "AWS License Manager",
      "smithy.api#xmlNamespace": {
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            "default": false,
            "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
            "type": "Boolean"
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            "default": false,
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"supportsDualStack"
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both",
            "type": "error"
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        "UseDualStack": false
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          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.us-gov-west-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-west-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-west-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-gov-east-1.api.aws"
          }
        },

    "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": true
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```
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
         "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
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            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled
but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },

      {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
            }
```

```
                },

        "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "error": "DualStack is enabled but this partition does not support DualStack"
                },
                "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                }
            },
            {
                "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

    "expect": {
                    "endpoint": {
                        "url": "https://example.com"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://example.com"
                    }
                },
                "params": {
                    "UseFIPS": false,

      "UseDualStack": false,
                    "Endpoint": "https://example.com"
                }
```

```
                },
                {
                  "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                  "expect": {
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                  "expect": {
                    "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "Missing region",
                  "expect": {
                    "error": "Invalid Configuration: Missing Region"
                  }
                }
              ],
              "version": "1.0"
            }
          }
        },
        "com.amazonaws.licensemanager#AcceptGrant": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
          "output": {
            "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
          },
          "errors": [
            {
```

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            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"

}
    ],
    "traits": {
      "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
    }
  },
  "com.amazonaws.licensemanager#AcceptGrantRequest": {
    "type": "structure",
    "members": {
      "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
          "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#AcceptGrantResponse": {
    "type": "structure",
    "members": {
      "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Grant
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ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {

 "code": "ServiceAccessDenied",
                "httpResponseCode": 401
            },
            "smithy.api#documentation": "<p>Access to resource denied.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 401
        }
    },
    "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
        "type": "enum",
        "members": {
            "DISTRIBUTED_GRANTS_ONLY": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
                }
            },
            "ALL_GRANTS_PERMITTED_BY_ISSUER": {
```

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            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#AllowedOperation": {

    "type": "enum",
        "members": {
          "CREATE_GRANT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CreateGrant"
            }
          },
          "CHECKOUT_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckoutLicense"
            }
          },
          "CHECKOUT_BORROW_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckoutBorrowLicense"
            }
          },
          "CHECK_IN_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckInLicense"
            }
          },
          "EXTEND_CONSUMPTION_LICENSE":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ExtendConsumptionLicense"
            }
          },
          "LIST_PURCHASED_LICENSES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ListPurchasedLicenses"
            }
          },
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            "CREATE_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CreateToken"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max":
7
            }
        }
    },
    "com.amazonaws.licensemanager#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
```

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{
            "code": "AuthorizationFailure",
            "httpResponseCode": 403
        },
        "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n        policy associated with this account.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 403
      }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
      "type": "structure",
      "members": {
        "LastRunTime": {
          "target": "com.amazonaws.licensemanager#DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes automated discovery.</p>"
      }
    },

  "com.amazonaws.licensemanager#Boolean": {
      "type": "boolean",
      "traits": {
        "smithy.api#default": false
      }
    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
      "type": "structure",
      "members": {
        "AllowEarlyCheckIn": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxTimeToLiveInMinutes": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
            "smithy.api#required": {}
          }
        }
```

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},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

     },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
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            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
               "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
         }
      },
      "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
         "type": "structure",
         "members":
{
            "LicenseArn": {
               "target": "com.amazonaws.licensemanager#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                  "smithy.api#required": {}
               }
```

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            },
            "Entitlements": {
              "target": "com.amazonaws.licensemanager#EntitlementDataList",
              "traits": {
                "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                "smithy.api#required": {}
              }
            },
            "DigitalSignatureMethod": {
              "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
              "traits": {
                "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n         For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                "smithy.api#required": {}
              }
            },
            "NodeId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
              }
            },
            "CheckoutMetadata": {
              "target": "com.amazonaws.licensemanager#MetadataList",
              "traits": {
                "smithy.api#documentation": "<p>Information about constraints.</p>"
              }
            },
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientToken",
              "traits": {
                "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
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```
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
              }
            },
            "LicenseConsumptionToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
              }
            },
            "EntitlementsAllowed":
{
              "target": "com.amazonaws.licensemanager#EntitlementDataList",
              "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
              }
            },
            "NodeId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
              }
            },
            "SignedToken": {
              "target": "com.amazonaws.licensemanager#SignedToken",
              "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
              }
            },
            "IssuedAt": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
              }
            },
            "Expiration": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
              }
            },
            "CheckoutMetadata": {
              "target": "com.amazonaws.licensemanager#MetadataList",
              "traits": {
                "smithy.api#documentation": "<p>Information about constraints.</p>"
              }
            }
          },
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      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CheckoutLicense": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target":
"com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Checks out the specified license.</p>\n      <note>\n      <p>If the
account that created the license is the same that is performing the check out, you must\n      specify the account
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as the beneficiary.</p>\n        </note>"
        }
      },
      "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
          "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product
 SKU.</p>",
              "smithy.api#required": {}
            }
          },
          "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
              "smithy.api#documentation": "<p>Checkout type.</p>",
              "smithy.api#required": {}
            }
          },
          "KeyFingerprint": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
              "smithy.api#required": {}
            }
          },
          "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
              "smithy.api#documentation": "<p>License entitlements.</p>",

      "smithy.api#required": {}
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          },
          "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License beneficiary.</p>"
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            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        }
    },
    "traits": {

   "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
    "type": "structure",
    "members": {
        "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
         "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "IssuedAt": {
```

```
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
          },
          "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
            }
          },
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutType": {
        "type": "enum",
        "members": {
          "PROVISIONAL": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PROVISIONAL"
            }
          },
          "PERPETUAL": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PERPETUAL"
            }
           }
        }
      },
      "com.amazonaws.licensemanager#ClientRequestToken": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 36
          }
        }
```

```
    },
    "com.amazonaws.licensemanager#ClientToken": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 2048
        },
        "smithy.api#pattern": "^\\S+$"
      }
    },
    "com.amazonaws.licensemanager#ConflictException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "ConflictException",
          "httpResponseCode":
409
        },
        "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 409
      }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
      "type": "structure",
      "members": {
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
          }
        },
        "ConsumedLicenses": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
          }
        }
      },
```

```
"traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
            "RenewType": {
                "target": "com.amazonaws.licensemanager#RenewType",
                "traits": {
                    "smithy.api#documentation": "<p>Renewal frequency.</p>"
                }
            },
            "ProvisionalConfiguration": {
                "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
                 }
            },
            "BorrowConfiguration": {
                "target": "com.amazonaws.licensemanager#BorrowConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
```

```
            {
               "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
license\n         entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
         }
      },
      "com.amazonaws.licensemanager#CreateGrantRequest": {
         "type": "structure",
         "members": {
            "ClientToken": {
               "target": "com.amazonaws.licensemanager#ClientToken",
               "traits": {
                  "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                  "smithy.api#required": {}
               }
            },
            "GrantName": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Grant name.</p>",
                  "smithy.api#required": {}

   }
            },
            "LicenseArn": {
```

```
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          },
          "Principals": {
            "target": "com.amazonaws.licensemanager#PrincipalArnList",
            "traits": {
              "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN):</p>\n <ul>\n <li>\n <p>An Amazon Web Services account, which includes only the account specified.</p>\n </li>\n </ul>\n <ul>\n <li>\n <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n </li>\n </ul>\n <ul>\n\n <li>\n <p>An organization, which will include all accounts across your organization.</p>\n </li>\n </ul>",
              "smithy.api#required": {}
            }
          },
          "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Home Region of the grant.</p>",
              "smithy.api#required": {}
            }
          },
          "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },

      "com.amazonaws.licensemanager#CreateGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
```

```
            "Status": {
               "target": "com.amazonaws.licensemanager#GrantStatus",
               "traits": {
                  "smithy.api#documentation": "<p>Grant status.</p>"
               }
            },
            "Version": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Grant version.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanager#CreateGrantVersion":
{
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
```

```
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information,
see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",

   "smithy.api#required": {}
            }
          },
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          },
          "GrantName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant name.</p>"
            }
          },
          "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
             "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
              "smithy.api#documentation": "<p>Grant status reason.</p>"
```

```
            }
          },
          "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
          },
          "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
              "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
          }
        },
        "traits":
{
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicense": {
        "type": "operation",
```

```
    "input": {
      "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#RedirectException"
       },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Creates a license.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Creates a license configuration.</p>\n      <p>A license configuration is an abstraction of a customer license agreement that can be\n      consumed and enforced by License Manager. Components include specifications for the license\n      type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n      Dedicated Instance, Dedicated Host, or
 all of these), license affinity  to host (how long a \n      license must be associated with a host), and the number of licenses purchased and used.</p>"
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the license configuration.</p>",
            "smithy.api#required": {}
          }
        },
        "Description": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Description of the license configuration.</p>"
          }
        },
        "LicenseCountingType": {
          "target": "com.amazonaws.licensemanager#LicenseCountingType",
          "traits": {
            "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseCount": {
          "target": "com.amazonaws.licensemanager#BoxLong",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
            }
        },
        "LicenseRules": {
            "target":
 "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n        <li>\n            <p>\n                <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
        <code>licenseAffinityToHost</code> |\n            <code>maximumCores</code> |
<code>minimumCores</code>\n            </p>\n        </li>\n        <li>\n            <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n            <code>maximumCores</code> |
<code>minimumCores</code> |\n            <code>maximumSockets</code> | <code>minimumSockets</code> |\n
        <code>maximumVcpus</code> | <code>minimumVcpus</code>\n            </p>\n        </li>\n
<li>\n
  <p>\n            <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n            <code>maximumSockets</code> |
<code>minimumSockets</code>\n            </p>\n        </li>\n        <li>\n            <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n            <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n            </p>\n        </li>\n    </ul>\n    <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"
            }
        },

  "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
                "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
```

```
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>Product information.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
         }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
         "type": "structure",
         "members": {
            "ResourceArn": {

               "target": "com.amazonaws.licensemanager#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                  "smithy.api#required": {}
               }
            },
            "SourceLicenseContext": {
               "target": "com.amazonaws.licensemanager#LicenseConversionContext",
               "traits": {
                  "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n         For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                  "smithy.api#required": {}
               }
            },
            "DestinationLicenseContext":
{
               "target": "com.amazonaws.licensemanager#LicenseConversionContext",
               "traits": {
                  "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
```

```
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
    "type": "structure",
    "members": {
      "LicenseConversionTaskId": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

    "traits": {
          "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
       },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
```

```
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "ReportGeneratorName":
{
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be
generated:</p>\n            <ul>\n            <li>\n                <p>License configuration report - Reports the number and
details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource
report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n
</ul>",
                    "smithy.api#required": {}

    }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>Defines the type of license configuration the report generator
tracks.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
                "traits": {
                    "smithy.api#documentation": "<p>Frequency by which reports are generated.  Reports can be
generated daily, monthly, or weekly.</p>",
                    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientRequestToken",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Unique,
case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                "smithy.api#required": {}
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
          "LicenseManagerReportGeneratorArn":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
generator.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>",
              "smithy.api#required": {}
            }
```

```
        },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product
name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductSKU": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product SKU.</p>",
            "smithy.api#required": {}
          }
        },
        "Issuer": {
          "target": "com.amazonaws.licensemanager#Issuer",
          "traits": {
            "smithy.api#documentation": "<p>License issuer.</p>",
            "smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region for the license.</p>",
            "smithy.api#required": {}

  }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
            "smithy.api#required": {}
          }
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
          "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>",
            "smithy.api#required": {}
          }
        },
        "Beneficiary": {
          "target": "com.amazonaws.licensemanager#String",
```

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            "traits": {
              "smithy.api#documentation": "<p>License beneficiary.</p>",
              "smithy.api#required": {}
            }
          },
          "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n          usage.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license.</p>"
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseResponse": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          },
```

```
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
    }
```

```
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target":
"com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product name.</p>",
            "smithy.api#required": {}
          }
        },
        "Issuer": {
          "target": "com.amazonaws.licensemanager#Issuer",
          "traits":
{
            "smithy.api#documentation": "<p>License issuer.</p>",
            "smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
            "smithy.api#required": {}
          }
```

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            },
            "LicenseMetadata": {
               "target": "com.amazonaws.licensemanager#MetadataList",
               "traits": {
                  "smithy.api#documentation": "<p>Information about the license.</p>"
               }
            },
            "Entitlements": {
               "target": "com.amazonaws.licensemanager#EntitlementList",
               "traits": {
                  "smithy.api#documentation": "<p>License entitlements.</p>",
                  "smithy.api#required": {}
               }
            },
            "ConsumptionConfiguration": {
               "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
               "traits": {
                  "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n         usage.</p>",
                  "smithy.api#required": {}
               }
            },

   "Status": {
               "target": "com.amazonaws.licensemanager#LicenseStatus",
               "traits": {
                  "smithy.api#documentation": "<p>License status.</p>",
                  "smithy.api#required": {}
               }
            },
            "ClientToken": {
               "target": "com.amazonaws.licensemanager#ClientToken",
               "traits": {
                  "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                  "smithy.api#required": {}
               }
            },
            "SourceVersion": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Current version of the license.</p>"
               }
            }
         },
         "traits": {
```

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"smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>License ARN.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>New version of the license.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseStatus",
          "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output":
{}
      }
    },
    "com.amazonaws.licensemanager#CreateToken": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateTokenRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateTokenResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
```

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            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },

        {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n          <p>A refresh token is a JWT token used to get an access token. With an access token,\n          you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n          call License Manager to manage the specified license.</p>"
          }
        },
        "com.amazonaws.licensemanager#CreateTokenRequest": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits":
 {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n          JWT token.</p>",
                "smithy.api#required": {}
              }
            },
            "RoleArns": {
              "target": "com.amazonaws.licensemanager#ArnList",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n          License Manager does not check whether the roles are in use.</p>"
              }
            },
            "ExpirationInDays": {
              "target": "com.amazonaws.licensemanager#Integer",
              "traits": {
                "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The default is 365 days.</p>"
              }
```

```
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n          to the amr claim of the JWT token.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",

                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
            "TokenType": {
                "target": "com.amazonaws.licensemanager#TokenType",
                "traits": {
                    "smithy.api#documentation": "<p>Token type.</p>"
                }
            },
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DateTime": {
```

```
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
```

```
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
```

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            },
            "Status": {
               "target": "com.amazonaws.licensemanager#GrantStatus",
               "traits": {
                  "smithy.api#documentation": "<p>Grant status.</p>"
               }
            },
            "Version": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation":
"<p>Grant version.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanager#DeleteLicense": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },

    "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n         <p>You cannot
delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members":
{
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

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            "smithy.api#documentation": "<p>ID of the license configuration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
```

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n        <p>This action deletes the report generator, which stops it from generating future reports.\n        The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {

 "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>",
                    "smithy.api#required":
```

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{}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          },
          "DeletionDate": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteToken": {
        "type": "operation",
         "input": {
          "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
```

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            },
            {
               "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

      {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
         }
      },
      "com.amazonaws.licensemanager#DeleteTokenRequest": {
         "type": "structure",
         "members": {
            "TokenId": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Token ID.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanager#DeleteTokenResponse": {
         "type": "structure",
         "members": {},
         "traits": {
            "smithy.api#output": {}

       }
      },
      "com.amazonaws.licensemanager#DigitalSignatureMethod": {
         "type": "enum",
         "members": {
            "JWT_PS384": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "JWT_PS384"
               }
```

```
            }
          }
        },
        "com.amazonaws.licensemanager#Entitlement": {
          "type": "structure",
          "members": {
            "Name": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement name.</p>",
                "smithy.api#required": {}
              }
            },
            "Value": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
              }
            },
            "MaxCount": {
              "target": "com.amazonaws.licensemanager#Long",
              "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
              }
            },
            "Overage": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
              }
            },
            "Unit": {
              "target": "com.amazonaws.licensemanager#EntitlementUnit",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement unit.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowCheckIn": {
              "target":
"com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
              }
            }
          },
          "traits": {
```

```
            "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementData": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement
data value.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "enum",
        "members": {
            "COUNT": {
                "target": "smithy.api#Unit",
                "traits": {

"smithy.api#enumValue": "Count"
                }
            },
```

```
"NONE": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "None"
   }
},
"SECONDS": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Seconds"
   }
},
"MICROSECONDS": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Microseconds"
   }
},
"MILLISECONDS": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Milliseconds"
   }
},
"BYTES": {
   "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bytes"
   }
},
"KILOBYTES": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Kilobytes"
   }
},
"MEGABYTES": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Megabytes"
   }
},
"GIGABYTES": {
   "target": "smithy.api#Unit",
   "traits": {
      "smithy.api#enumValue": "Gigabytes"
   }
},
```

```
        "TERABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabytes"
          }
        },
        "BITS":
{
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits"
          }
        },
        "KILOBITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits"
          }
        },
        "MEGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabits"
          }
        },
        "GIGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits"
          }
        },
        "TERABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits"

    }
        },
        "PERCENT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Percent"
          }
        },
        "BYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bytes/Second"
```

```
            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
        "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes/Second"
            }
        },
        "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits/Second"
            }
        },
        "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
            }
        },
        "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue":
"Megabits/Second"
            }
        },
        "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
```

```
                "smithy.api#enumValue": "Gigabits/Second"
              }
            },
            "TERABITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Terabits/Second"
              }
            },
            "COUNT_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Count/Second"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#EntitlementList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#Entitlement"
          }
        },
        "com.amazonaws.licensemanager#EntitlementNotAllowedException":
    {
          "type": "structure",
          "members": {
            "Message": {
              "target": "com.amazonaws.licensemanager#Message"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
          }
        },
        "com.amazonaws.licensemanager#EntitlementUnit": {
          "type": "enum",
          "members": {
            "COUNT": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Count"
              }
            },
            "NONE": {
              "target": "smithy.api#Unit",
```

```
            "traits": {
                "smithy.api#enumValue": "None"
            }
        },
        "SECONDS":
{
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Seconds"
            }
        },
        "MICROSECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Microseconds"
            }
        },
        "MILLISECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Milliseconds"
            }
        },
        "BYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes"
            }
        },
        "KILOBYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes"
             }
        },
        "MEGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes"
            }
        },
        "GIGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabytes"
            }
        },
        "TERABYTES": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Terabytes"
            }
          },
          "BITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Bits"
            }
          },
          "KILOBITS": {
            "target": "smithy.api#Unit",
            "traits": {

             "smithy.api#enumValue": "Kilobits"
            }
          },
          "MEGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Megabits"
            }
          },
          "GIGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Gigabits"
            }
          },
          "TERABITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Terabits"
            }
          },
          "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Percent"
            }
          },
          "BYTES_PER_SECOND": {
            "target":
"smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Bytes/Second"
            }
```

```
            },
            "KILOBYTES_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
              }
            },
            "MEGABYTES_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
              }
            },
            "GIGABYTES_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
              }
            },
            "TERABYTES_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {

"smithy.api#enumValue": "Terabytes/Second"
              }
            },
            "BITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Bits/Second"
              }
            },
            "KILOBITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
              }
            },
            "MEGABITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Megabits/Second"
              }
            },
            "GIGABITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
```

```
            }
        },

  "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementUsage": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

       "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
            }
        },
        "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
        },
        "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
            }
        }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
```

```
      "type": "structure",
      "members": {
        "LicenseConsumptionToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License consumption token.</p>",
            "smithy.api#required": {}

    }
        },
        "DryRun": {
          "target": "com.amazonaws.licensemanager#Boolean",
          "traits": {
            "smithy.api#default": false,
            "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
      "type": "structure",
      "members": {
        "LicenseConsumptionToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License consumption token.</p>"
          }
        },

        "Expiration": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#FailedDependencyException": {
      "type": "structure",
      "members": {
        "Message": {
```

```
            "target": "com.amazonaws.licensemanager#Message"
          },
          "ErrorCode": {
            "target": "com.amazonaws.licensemanager#String"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "FailedDependency",
            "httpResponseCode": 424
          },
          "smithy.api#documentation":
 "<p>A dependency required to run the API is missing.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 424
        }
      },
      "com.amazonaws.licensemanager#Filter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#FilterName",
            "traits": {
              "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
            }
          },
          "Values": {
            "target": "com.amazonaws.licensemanager#FilterValues",
            "traits": {
              "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only
specify one value for the filter.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter
 name and value pair that is used to return more specific results from a\n        describe operation. Filters can be used
to match a set of resources by specific criteria,\n        such as tags, attributes, or IDs.</p>"
        }
      },
      "com.amazonaws.licensemanager#FilterLimitExceededException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
```

```
        "aws.protocols#awsQueryError": {
          "code": "FilterLimitExceeded",
          "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#FilterList": {
      "type": "list",
       "member": {
        "target": "com.amazonaws.licensemanager#Filter"
      }
    },
    "com.amazonaws.licensemanager#FilterName": {
      "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValue": {
      "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValues": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
          "smithy.api#xmlName": "item"
        }
      }
    },
    "com.amazonaws.licensemanager#Filters": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
          "smithy.api#xmlName": "item"
        }
      }
    },
    "com.amazonaws.licensemanager#GetAccessToken": {
      "type": "operation",
      "input": {
         "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
      },
      "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n        are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
 {
        "type": "structure",
        "members": {
```

```
        "AccessToken": {
          "target": "com.amazonaws.licensemanager#TokenString",
          "traits": {
            "smithy.api#documentation": "<p>Temporary access token.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetGrant": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetGrantRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"

      },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
      }
    },
    "com.amazonaws.licensemanager#GetGrantRequest": {
```

```
    "type": "structure",
    "members": {
      "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
         "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
          "smithy.api#required": {}
        }
      },
      "Version": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Grant version.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
      "Grant": {
        "target": "com.amazonaws.licensemanager#Grant",
        "traits": {
          "smithy.api#documentation": "<p>Grant details.</p>"
        }
      }
    },
    "traits": {

  "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
```

```
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"

        },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits":
{
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
          "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
            }
          },
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          },
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>"
             }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
          },
          "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
```

```
        "traits": {
            "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
        }
    },
    "LicenseRules": {
        "target": "com.amazonaws.licensemanager#StringList",
        "traits": {
            "smithy.api#documentation": "<p>License rules.</p>"
        }
    },
    "LicenseCount": {
        "target": "com.amazonaws.licensemanager#BoxLong",

      "traits": {
            "smithy.api#documentation": "<p>Number of available licenses.</p>"
        }
    },
    "LicenseCountHardLimit": {
        "target": "com.amazonaws.licensemanager#BoxBoolean",
        "traits": {
            "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
        }
    },
    "ConsumedLicenses": {
        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
            "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
        }
    },
    "Status": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>License configuration status.</p>"
        }

},
    "OwnerAccountId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
            "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
        }
    },
    "ConsumedLicenseSummaryList": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
        "traits": {
            "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
        }
    },
```

```
            "ManagedResourceSummaryList": {
              "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanager#TagList",
               "traits": {
                "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
              }
            },
            "ProductInformationList": {
              "target": "com.amazonaws.licensemanager#ProductInformationList",
              "traits": {
                "smithy.api#documentation": "<p>Product information.</p>"
              }
            },
            "AutomatedDiscoveryInformation": {
              "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
              "traits": {
                "smithy.api#documentation": "<p>Automated discovery information.</p>"
              }
            },
            "DisassociateWhenNotFound": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#GetLicenseConversionTask": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {

  "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information
on.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
     },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
```

```
            }
          },
          "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information
about the license type converted from.</p>"
            }
          },
          "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
              "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
          },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
            }
          },
          "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
          },
          "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
          }
        },
```

```
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

         },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
              "smithy.api#required":
{}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
          "ReportGenerator": {
            "target": "com.amazonaws.licensemanager#ReportGenerator",
            "traits": {
              "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {

 "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
```

```
  },
  "com.amazonaws.licensemanager#GetLicenseResponse": {
    "type": "structure",
    "members": {
      "License": {
        "target": "com.amazonaws.licensemanager#License",
        "traits": {
          "smithy.api#documentation": "<p>License details.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },

"com.amazonaws.licensemanager#GetLicenseUsage": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {

"target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
    }
```

```
    },
    "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
      "type": "structure",
      "members": {
        "LicenseUsage": {
          "target":
"com.amazonaws.licensemanager#LicenseUsage",
          "traits": {
            "smithy.api#documentation": "<p>License usage details.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n         and so on.</p>"

 }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n         cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
                }
```

```
        },
            "LicenseManagerResourceShareArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n         provides member accounts with access to this share.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Grant": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {

 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ParentArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Parent ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "GranteePrincipalArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
```

```
"smithy.api#documentation": "<p>The grantee principal ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantStatus": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status reason.</p>"
                 }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Granted operations.</p>",
                    "smithy.api#required": {}
                }
            },
            "Options": {
                "target": "com.amazonaws.licensemanager#Options",
                "traits": {
                    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation":
```

```
"<p>Describes a grant.</p>"
        }
      },
      "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Grant"
        }
      },
      "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
          "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
          },
          "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_ACCEPT"
            }
          },
          "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "REJECTED"

          }
          },
          "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ACTIVE"
            }
          },
          "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
          },
          "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
```

```
            },
            "PENDING_DELETE": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
              }
            },
            "DISABLED": {
              "target": "smithy.api#Unit",
              "traits":
{
                "smithy.api#enumValue": "DISABLED"
              }
            },
            "WORKFLOW_COMPLETED": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#GrantedLicense": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
              }
            },
            "LicenseName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>License name.</p>"
              }

 },
            "ProductName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
              }
            },
            "ProductSKU": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
```

```
        }
      },
      "Issuer": {
        "target": "com.amazonaws.licensemanager#IssuerDetails",
        "traits": {
          "smithy.api#documentation": "<p>Granted license issuer.</p>"
        }
      },
      "HomeRegion": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

       }
      },
      "Status": {
        "target": "com.amazonaws.licensemanager#LicenseStatus",
        "traits": {
          "smithy.api#documentation": "<p>Granted license status.</p>"
        }
      },
      "Validity": {
        "target": "com.amazonaws.licensemanager#DatetimeRange",
        "traits": {
          "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
        }
      },
      "Beneficiary": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
        }
      },
      "Entitlements": {
        "target": "com.amazonaws.licensemanager#EntitlementList",
         "traits": {
          "smithy.api#documentation": "<p>License entitlements.</p>"
        }
      },
      "ConsumptionConfiguration": {
        "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
        "traits": {
          "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
        }
      },
      "LicenseMetadata": {
        "target": "com.amazonaws.licensemanager#MetadataList",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Granted license metadata.</p>"
            }
          },
          "CreateTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

  }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Version of the granted license.</p>"
            }
          },
          "ReceivedMetadata": {
            "target": "com.amazonaws.licensemanager#ReceivedMetadata",
            "traits": {
              "smithy.api#documentation": "<p>Granted license received metadata.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
        }
      },
      "com.amazonaws.licensemanager#GrantedLicenseList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#GrantedLicense"
        }
      },
      "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
      },
      "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
```

```
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "InvalidParameterValueProvided",
          "httpResponseCode": 400
        },
        "smithy.api#documentation":
"<p>One or more parameter values are not valid.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "InvalidResourceState",
          "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the filter.</p>",
            "smithy.api#required": {}
          }
```

```
        },
        "Condition": {
          "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
          "traits": {
            "smithy.api#documentation": "<p>Condition of the filter.</p>",
            "smithy.api#required": {}
          }
        },
        "Value": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Value of the filter.</p>"
          }
        }

},
      "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
      }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
      "type": "enum",
      "members": {
        "EQUALS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EQUALS"
          }
        },
        "NOT_EQUALS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "NOT_EQUALS"
          }
        },
        "BEGINS_WITH": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "BEGINS_WITH"
          }
        },
        "CONTAINS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "CONTAINS"
          }
        }
      }
```

```
    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#InventoryFilter"
      }
    },
    "com.amazonaws.licensemanager#Issuer": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Issuer name.</p>",
            "smithy.api#required": {}
          }
        },
        "SignKey": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
      }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Issuer name.</p>"
          }
        },
        "SignKey": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
          }
        },
        "KeyFingerprint": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
        }
      },
      "com.amazonaws.licensemanager#License": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

           "smithy.api#documentation": "<p>License name.</p>"
            }
          },
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product name.</p>"
            }
          },
          "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product SKU.</p>"
            }
          },
          "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
              "smithy.api#documentation": "<p>License issuer.</p>"
            }
          },
          "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
            "smithy.api#documentation": "<p>Home Region of the license.</p>"
               }
            },
            "Status": {
               "target": "com.amazonaws.licensemanager#LicenseStatus",
               "traits": {
                  "smithy.api#documentation": "<p>License status.</p>"
               }
            },
            "Validity": {
               "target": "com.amazonaws.licensemanager#DatetimeRange",
               "traits": {
                  "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
               }
            },
            "Beneficiary": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>License beneficiary.</p>"
               }
            },
            "Entitlements": {

   "target": "com.amazonaws.licensemanager#EntitlementList",
               "traits": {
                  "smithy.api#documentation": "<p>License entitlements.</p>"
               }
            },
            "ConsumptionConfiguration": {
               "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
               "traits": {
                  "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
               }
            },
            "LicenseMetadata": {
               "target": "com.amazonaws.licensemanager#MetadataList",
               "traits": {
                  "smithy.api#documentation": "<p>License metadata.</p>"
               }
            },
            "CreateTime": {
               "target": "com.amazonaws.licensemanager#ISO8601DateTime",
               "traits": {
                  "smithy.api#documentation": "<p>License
 creation time.</p>"
               }
            },
```

```
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
      }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
      "type": "structure",
      "members": {
        "LicenseConfigurationId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
          }
        },
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
          }
        },
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the license configuration.</p>"
          }
        },
        "Description": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Description of the license configuration.</p>"
          }
        },
        "LicenseCountingType": {
          "target": "com.amazonaws.licensemanager#LicenseCountingType",
          "traits": {
            "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
           }
        },
        "LicenseRules": {
          "target": "com.amazonaws.licensemanager#StringList",
          "traits": {
            "smithy.api#documentation": "<p>License rules.</p>"
```

```
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
             "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license configuration.</p>"
            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

       }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
            }
        },
        "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
            }
        },
        "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
                "smithy.api#documentation": "<p>Product information.</p>"
            }
        },
        "AutomatedDiscoveryInformation": {

            "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
            "traits": {
                "smithy.api#documentation": "<p>Automated discovery information.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n        must be associated with a host), and the number of licenses purchased and used.</p>"
      }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
      "type": "structure",
      "members": {
        "ResourceArn":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of server resource.</p>"
            }
        },
        "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource consuming licenses.</p>"
            }
```

```
            },
            "AssociationTime": {
               "target": "com.amazonaws.licensemanager#DateTime",
               "traits": {

      "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
               }
            },
            "AmiAssociationScope": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
         }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
         }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
         "type": "enum",
         "members":
 {
            "AVAILABLE": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "AVAILABLE"
               }
            },
            "DISABLED": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "DISABLED"
               }
            }
         }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
         "type": "structure",
         "members": {
            "ResourceArn": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits":
{
              "smithy.api#documentation": "<p>Type of resource.</p>"
            }
          },
          "ResourceStatus": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Status of the resource.</p>"
            }
          },
          "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
            }
          },
          "AssociationTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
            }
          },

    "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license
configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
```

```
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurations": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConfiguration"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionContext": {

    "type": "structure",
        "members": {
          "UsageOperation": {
            "target": "com.amazonaws.licensemanager#UsageOperation",
            "traits": {
              "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from.  For more information about which platforms correspond to which usage
operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n        </p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {

       "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
            }
          },
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n        conversion task.</p>"
            }
          },
          "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
```

```
            }
          },
          "DestinationLicenseContext": {
            "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the conversion task.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
          },
          "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
            }
          },
          "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
            }
          },
          "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTaskId": {
```

```
        "type": "string",
        "traits": {

       "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
          "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "IN_PROGRESS"
            }
          },
          "SUCCEEDED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "SUCCEEDED"
            }
          },
          "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
      },
      "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
          "VCPU": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "vCPU"
            }
```

```
        },
        "INSTANCE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Instance"
          }
        },
        "CORE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Core"
          }
        },
        "SOCKET": {
          "target": "smithy.api#Unit",
           "traits": {
            "smithy.api#enumValue": "Socket"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#LicenseDeletionStatus": {
      "type": "enum",
      "members": {
        "PENDING_DELETE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "PENDING_DELETE"
          }
        },
        "DELETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DELETED"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#LicenseList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#License"
      }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailure": {

      "type": "structure",
      "members": {
```

```
            "ResourceArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
              }
            },
            "ResourceType": {
              "target": "com.amazonaws.licensemanager#ResourceType",
              "traits": {
                "smithy.api#documentation": "<p>Resource type.</p>"
              }
            },
            "ErrorMessage": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Error message.</p>"
              }
            },
            "FailureTime": {
              "target": "com.amazonaws.licensemanager#DateTime",
              "traits": {

        "smithy.api#documentation": "<p>Failure time.</p>"
              }
            },
            "OperationName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Name of the operation.</p>"
              }
            },
            "ResourceOwnerId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
              }
            },
            "OperationRequestedBy": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
              }
            },
            "MetadataList": {

              "target": "com.amazonaws.licensemanager#MetadataList",
              "traits": {
```

```
                "smithy.api#documentation": "<p>Reserved.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
          }
        },
        "com.amazonaws.licensemanager#LicenseOperationFailureList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
          }
        },
        "com.amazonaws.licensemanager#LicenseSpecification": {
          "type": "structure",
          "members": {
            "LicenseConfigurationArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

                "smithy.api#required": {}
              }
            },
            "AmiAssociationScope": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
          }
        },
        "com.amazonaws.licensemanager#LicenseSpecifications": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#LicenseSpecification"
          }
        },
        "com.amazonaws.licensemanager#LicenseStatus": {
          "type": "enum",
          "members": {
            "AVAILABLE": {
```

```
            "target": "smithy.api#Unit",

        "traits": {
            "smithy.api#enumValue": "AVAILABLE"
          }
        },
        "PENDING_AVAILABLE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "PENDING_AVAILABLE"
          }
        },
        "DEACTIVATED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DEACTIVATED"
          }
        },
        "SUSPENDED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "SUSPENDED"
          }
        },
        "EXPIRED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EXPIRED"
          }
        },

      "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DELETED"
          }
        }
      }
  },
  "com.amazonaws.licensemanager#LicenseUsage": {
      "type": "structure",
      "members": {
```

```
            "EntitlementUsages": {
               "target": "com.amazonaws.licensemanager#EntitlementUsageList",
               "traits": {
                  "smithy.api#documentation": "<p>License entitlement usages.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

         }
      },
      "com.amazonaws.licensemanager#LicenseUsageException": {
         "type": "structure",
         "members": {
            "Message": {
               "target": "com.amazonaws.licensemanager#Message"
            }
         },
         "traits": {
            "aws.protocols#awsQueryError": {
               "code": "LicenseUsageFailure",
               "httpResponseCode": 412
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
         }
      },
      "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
         },
         "output": {

      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
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            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n         <p>Resource associations need not consume licenses from a license
 configuration. \n         For example, an AMI or a stopped instance might not consume a license (depending on \n
 the license rules).</p>"
         }
      },
      "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
         "type": "structure",
         "members": {
            "LicenseConfigurationArn": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                  "smithy.api#required": {}
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanager#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>Maximum number of results
 to return in a single call.</p>"
               }
            },
            "NextToken": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
         "type": "structure",
```

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        "members": {
          "LicenseConfigurationAssociations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
            "traits": {
              "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
            }
          },
          "NextToken": {

 "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListDistributedGrants": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
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            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
          "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {

          "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n
  <li>\n            <p>\n              <code>GranteePrincipalARN</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>LicenseIssuerName</code>\n
        </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
        "type": "structure",
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      "members": {
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",

    "traits": {
            "smithy.api#documentation": "<p>Distributed grant details.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
      },
      "errors": [
        {

"target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
      }
```

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    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
      "type": "structure",
      "members": {
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
      "type": "structure",
      "members": {
        "LicenseOperationFailureList": {
          "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
          "traits": {
            "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
```

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    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
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                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#Filters",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
          "type": "structure",
          "members": {
            "LicenseConfigurations": {
              "target": "com.amazonaws.licensemanager#LicenseConfigurations",
              "traits": {
                "smithy.api#documentation": "<p>Information about the license configurations.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",

             "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
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    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {

"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
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            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#Filters",
              "traits": {
                "smithy.api#documentation": "<p>\n         Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
          "type": "structure",
          "members": {
            "LicenseConversionTasks": {
              "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
              "traits": {
                "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target":
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"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
          "type": "structure",
          "members": {
            "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n          <li>\n            <p>\n              <code>LicenseConfigurationArn</code>\n
</p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits":
{
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
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            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
          "ReportGenerators": {
            "target": "com.amazonaws.licensemanager#ReportGeneratorList",
            "traits": {
              "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }

        }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
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                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
              },
              {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
              }
            ],
            "traits": {
              "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
            }
          },
          "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
            "type": "structure",
            "members": {
              "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                  "smithy.api#required": {}
                }
              },
              "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {

            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
              },
              "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
              }
            },
            "traits": {
              "smithy.api#input": {}
            }
          },
          "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
            "type": "structure",
            "members": {
              "LicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                  "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
                }
              },
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        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
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            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
               "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
               "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
               "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
               "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
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      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
      "type": "structure",
      "members": {
        "LicenseArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
          }
        },

     "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n
   <li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>Status</code>\n            </p>\n          </li>\n        </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token
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for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {

  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
```

```
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while specifying the\n          recipient as this Amazon Web Services account, your organization, or an organizational unit\n          (OU) to which this member account belongs.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n            <p>\n                <code>ParentArn</code>\n            </p>\n        </li>\n
<li>\n            <p>\n                <code>GranteePrincipalArn</code>\n            </p>\n        </li>\n    </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

```
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
      "type": "structure",
      "members": {
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",
          "traits": {
            "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
      "type": "structure",
      "members": {
        "GrantArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n      <ul>\n        <li>\n          <p>\n            <code>ProductSKU</code>\n          </p>\n
      </li>\n        <li>\n          <p>\n            <code>LicenseIssuerName</code>\n          </p>\n
</li>\n        <li>\n          <p>\n            <code>LicenseArn</code>\n          </p>\n        </li>\n
<li>\n          <p>\n            <code>GrantStatus</code>\n          </p>\n        </li>\n        <li>\n
<p>\n
      <code>GranterAccountId</code>\n          </p>\n        </li>\n      </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
```

```
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
      "type": "structure",
      "members": {
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",
           "traits": {
            "smithy.api#documentation": "<p>Received grant details.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedLicenses": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
```

```
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n
          </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
             "traits": {
              "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
          "type": "structure",
          "members": {
            "LicenseArns": {
              "target": "com.amazonaws.licensemanager#ArnList",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
              }
            },

           "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>Status</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>IssuerName</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Beneficiary</code>\n            </p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
               "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
          "type": "structure",
```

```
    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#GrantedLicenseList",
        "traits": {
          "smithy.api#documentation": "<p>Received license details.</p>"
        }
      },

      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
         "target": "com.amazonaws.licensemanager#FailedDependencyException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
```

```
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
          "type": "structure",
          "members": {
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#BoxInteger",
               "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#InventoryFilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n       are supported:</p>\n       <ul>\n       <li>\n       <p>\n       <code>account_id</code>
- The ID of the Amazon Web Services account that owns the resource.\n       Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
         </li>\n       <li>\n       <p>\n       <code>application_name</code> - The name of the
application. \n       Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n
  </li>\n       <li>\n       <p>\n       <code>license_included</code> - The type of license included. \n
         Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n       Possible values
are <code>sql-server-enterprise</code> | \n       <code>sql-server-standard</code> | \n       <code>sql-
server-web</code> |  \n       <code>windows-server-datacenter</code>.</p>\n       </li>\n       <li>\n
  <p>\n       <code>platform</code> - The platform of the resource.\n       Logical operators are
<code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n       </li>\n       <li>\n       <p>\n
       <code>resource_id</code> - The ID of the resource. \n       Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n       </li>\n       <li>\n       <p>\n
    <code>tag:<key></code> - The key/value combination of a tag assigned \n       to the resource. Logical
operators are <code>EQUALS</code> (single account) or\n       <code>EQUALS</code> |
<code>NOT_EQUALS</code> (cross account).</p>\n       </li>\n       </ul>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
```

```
    "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
      "type": "structure",
      "members": {
        "ResourceInventoryList": {
          "target": "com.amazonaws.licensemanager#ResourceInventoryList",
          "traits": {
            "smithy.api#documentation": "<p>Information
about the resources.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListTagsForResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

      "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>Information about the tags.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListTokensRequest": {
          "type": "structure",
          "members": {
            "TokenIds": {
              "target": "com.amazonaws.licensemanager#StringList",
              "traits": {

                "smithy.api#documentation": "<p>Token IDs.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n          <li>\n          <p>\n          <code>LicenseArns</code>\n          </p>\n          </li>\n
</ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits": {
                "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
              }
            }
          },
          "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
            "Tokens": {
                "target": "com.amazonaws.licensemanager#TokenList",
                "traits": {
                    "smithy.api#documentation": "<p>Received token details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n            consumption details by resource at a selected point in time. Use this action to audit the\n            current license consumption for any license inventory and configuration.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
          "type": "structure",
          "members": {
            "LicenseConfigurationArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#Filters",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n            are supported:</p>\n            <ul>\n              <li>\n                <p>\n                  <code>resourceArn</code> - The ARN of the license configuration resource.\n                  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n              </li>\n              <li>\n                <p>\n                  <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n              </li>\n              <li>\n                <p>\n                  <code>resourceAccount</code> - The ID of the account that owns the resource. \n                  Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n              </li>\n            </ul>"
              }
            }
```

```
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

"LicenseConfigurationUsageList": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#Location": {
        "type": "string"
      },
      "com.amazonaws.licensemanager#Long": {
        "type": "long"
      },
      "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
          "ResourceType":
{
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
            }
          },
          "AssociationCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
            }
          }
```

```
    },
    "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
    }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
},
"com.amazonaws.licensemanager#MaxSize100": {

"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
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            "traits": {
                "smithy.api#documentation": "<p>The value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
        }
      },
      "com.amazonaws.licensemanager#MetadataList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Metadata"
        }
      },
      "com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement maximum count is reached.</p>",
           "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },
      "com.amazonaws.licensemanager#Options": {
        "type": "structure",
        "members": {
          "ActivationOverrideBehavior": {
            "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
            "traits": {
              "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of activating a grant.\n          Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n          <code>Status</code> parameter.</p>\n          <ul>\n            <li>\n              <p>As a license administrator, you can optionally specify an\n                <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n            </li>\n            <li>\n              <p>As a grantor, you can optionally specify an\n                <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n                account in your organization.</p>\n            </li>\n            <li>\n              <p>As a grantee, if the grantor creating the distributed grant doesnt specify an\n                <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n                are activating the grant.</p>\n            </li>\n          </ul>\n          <dl>\n            <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n            <dd>\n              <p>Use this value to activate a grant without replacing any member accounts\n                active grants for the same product.</p>\n            </dd>\n            <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n            <dd>\n              <p>Use this value to activate a
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grant and disable other active grants in any\n member accounts
for the same product. This action will also replace their\n previously activated grants with this activated grant. \n </dd>\n </dl>"
}
}
},
"traits": {
"smithy.api#documentation": " The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see Granted licenses in License Manager in the License Manager User Guide. "
}
},
"com.amazonaws.licensemanager#OrganizationConfiguration": {
"type": "structure",
"members": {
"EnableIntegration": {
"target": "com.amazonaws.licensemanager#Boolean",
"traits": {
"smithy.api#default": false,
"smithy.api#documentation": " Enables Organizations integration. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Configuration information for Organizations. "
}
},
"com.amazonaws.licensemanager#PrincipalArnList": {
"type": "list",
"member": {
"target": "com.amazonaws.licensemanager#Arn"
},
"traits": {
"smithy.api#length": {
"min": 1,
"max": 1
}
}
},
"com.amazonaws.licensemanager#ProductInformation": {
"type": "structure",
"members": {
"ResourceType": {
"target": "com.amazonaws.licensemanager#String",
"traits": {

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                "smithy.api#documentation": "<p>Resource type. The
 possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
                "smithy.api#required": {}
              }
            },
            "ProductInformationFilterList": {
              "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
              "traits": {
                "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n          <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n          <p>The following filters and are supported when
the resource type \n          is <code>SSM_MANAGED</code>:</p>\n
        <ul>\n          <li>\n            <p>\n              <code>Application Name</code> - The name of the
application.\n              Logical operator is <code>EQUALS</code>.</p>\n          </li>\n          <li>\n
<p>\n              <code>Application Publisher</code> - The publisher of the application.\n              Logical
operator is <code>EQUALS</code>.</p>\n          </li>\n          <li>\n            <p>\n
<code>Application Version</code> - The version of the application.\n              Logical operator is
<code>EQUALS</code>.</p>\n          </li>\n          <li>\n            <p>\n              <code>Platform
Name</code> - The name of the platform.\n              Logical operator is <code>EQUALS</code>.</p>\n
</li>\n          <li>\n            <p>\n              <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
        </li>\n          <li>\n            <p>\n              <code>Tag:key</code> - The key of a tag attached to an
Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>.  The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key.\n              </p>\n          </li>\n          <li>\n            <p>\n
<code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from
automated discovery.\n              Logical operator is <code>NOT_EQUALS</code>.</p>\n          </li>\n
<li>\n            <p>\n              <code>License Included</code> - The type of license included.\n              Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n              Possible values are:
 <code>sql-server-enterprise</code> | \n              <code>sql-server-standard</code> | \n              <code>sql-server-
web</code> |  \n              <code>windows-server-datacenter</code>.</p>\n          </li>\n        </ul>\n
<p>The following filters and logical operators are supported when the resource type\n          is
<code>RDS</code>:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Engine Edition</code> -
The edition of the database engine.\n              Logical operator is <code>EQUALS</code>.\n              Possible
values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code>.</p>\n          </li>\n          <li>\n            <p>\n              <code>License Pack</code> - The license
pack.\n              Logical operator is <code>EQUALS</code>.\n              Possible values are: <code>data
guard</code> | \n              <code>diagnostic pack sqlt</code> | \n
            <code>tuning pack sqlt</code> | \n              <code>ols</code> | \n              <code>olap</code>.</p>\n
    </li>\n        </ul>",
                "smithy.api#required": {}
              }
            }
          },
```

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    "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

      "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
},
"com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
},
"com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
     }
},
"com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
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            "MaxTimeToLiveInMinutes": {
               "target": "com.amazonaws.licensemanager#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
         }
      },
      "com.amazonaws.licensemanager#RateLimitExceededException": {
         "type": "structure",
         "members": {
            "Message": {
               "target": "com.amazonaws.licensemanager#Message"
            }
         },
         "traits": {
             "aws.protocols#awsQueryError": {
               "code": "RateLimitExceeded",
               "httpResponseCode": 429
            },
            "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 429
         }
      },
      "com.amazonaws.licensemanager#ReceivedMetadata": {
         "type": "structure",
         "members": {
            "ReceivedStatus": {
               "target": "com.amazonaws.licensemanager#ReceivedStatus",
               "traits": {
                  "smithy.api#documentation": "<p>Received status.</p>"
               }
            },
            "ReceivedStatusReason": {
               "target": "com.amazonaws.licensemanager#StatusReasonMessage",
               "traits": {
                  "smithy.api#documentation": "<p>Received
 status reason.</p>"
               }
            },
            "AllowedOperations": {
               "target": "com.amazonaws.licensemanager#AllowedOperationList",
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            "traits": {
              "smithy.api#documentation": "<p>Allowed operations.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
        }
      },
      "com.amazonaws.licensemanager#ReceivedStatus": {
        "type": "enum",
        "members": {
          "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
          },
          "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue":
"PENDING_ACCEPT"
            }
          },
          "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "REJECTED"
            }
          },
          "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ACTIVE"
            }
          },
          "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
          },
          "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
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        },
        "DISABLED": {
          "target": "smithy.api#Unit",
           "traits": {
             "smithy.api#enumValue": "DISABLED"
          }
        },
        "WORKFLOW_COMPLETED": {
          "target": "smithy.api#Unit",
          "traits": {
             "smithy.api#enumValue": "WORKFLOW_COMPLETED"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#RedirectException": {
      "type": "structure",
      "members": {
        "Location": {
          "target": "com.amazonaws.licensemanager#Location",
          "traits": {
             "smithy.api#httpHeader": "Location"
          }
        },
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
         "smithy.api#error": "client",
        "smithy.api#httpError": 308
      }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#RejectGrantResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
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            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
          }
        },
        "com.amazonaws.licensemanager#RejectGrantRequest": {
          "type": "structure",
          "members": {
            "GrantArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}

  }
        },
        "com.amazonaws.licensemanager#RejectGrantResponse": {
          "type": "structure",
          "members": {
            "GrantArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
              }
            },
            "Status": {
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            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Weekly"
            }
          },
          "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Monthly"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ReportContext": {
        "type": "structure",
        "members": {
          "licenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
```

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        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this generator reports on.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
          }
        },
        "com.amazonaws.licensemanager#ReportFrequency": {
          "type": "structure",
          "members": {
            "value": {
              "target": "com.amazonaws.licensemanager#Integer",
              "traits": {
                "smithy.api#documentation": "<p>Number of times within the frequency period that a report is generated.  \n         The only supported value is <code>1</code>.</p>"
              }
            },
            "period": {
              "target": "com.amazonaws.licensemanager#ReportFrequencyType",

             "traits": {
                "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly, or monthly.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
          }
        },
        "com.amazonaws.licensemanager#ReportFrequencyType": {
          "type": "enum",
          "members": {
            "DAY": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "DAY"
              }
            },
            "WEEK": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "WEEK"
              }
            },
```

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            "MONTH": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "MONTH"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>"
                }
            },
            "ReportType": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
                "traits": {
                    "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
                }
            },
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
                }
            },
            "LastRunStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
                }
```

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            },
            "LastRunFailureReason":
 {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
               }
            },
            "LastReportGenerationTime": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
               }
            },
            "ReportCreatorAccount": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
               }
            },
            "Description": {
               "target": "com.amazonaws.licensemanager#String",

         "traits": {
                  "smithy.api#documentation": "<p>Description of the report generator.</p>"
               }
            },
            "S3Location": {
               "target": "com.amazonaws.licensemanager#S3Location",
               "traits": {
                  "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
               }
            },
            "CreateTime": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Time the report was created.</p>"
               }
            },
            "Tags": {
               "target": "com.amazonaws.licensemanager#TagList",
               "traits": {
                  "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
               }
```

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}
    },
    "traits": {
        "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
    }
},
"com.amazonaws.licensemanager#ReportGeneratorList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportGenerator"
    }
},
"com.amazonaws.licensemanager#ReportGeneratorName": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#ReportType": {
    "type": "enum",
    "members": {
        "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
            }

},
        "LICENSE_CONFIGURATION_USAGE_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "LicenseConfigurationUsageReport"
            }
        }
    }
},
"com.amazonaws.licensemanager#ReportTypeList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ReportType"
    }
},
"com.amazonaws.licensemanager#ResourceInventory": {
    "type": "structure",
    "members": {
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            "ResourceId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "Platform": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform of the resource.</p>"
                }
            },
            "PlatformVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
                }
            },
            "ResourceOwningAccountId":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ResourceInventoryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ResourceInventory"
        }
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},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
   "type": "structure",
   "members": {
      "Message": {
         "target": "com.amazonaws.licensemanager#Message"
      }
   },
   "traits": {
      "aws.protocols#awsQueryError": {
         "code": "ResourceLimitExceeded",

       "httpResponseCode": 400
      },
      "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
   }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
   "type": "structure",
   "members": {
      "Message": {
         "target": "com.amazonaws.licensemanager#Message"
      }
   },
   "traits": {
      "aws.protocols#awsQueryError": {
         "code": "InvalidResource.NotFound",
         "httpResponseCode": 400
      },
      "smithy.api#documentation": "<p>The resource cannot be found.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
   }
},
"com.amazonaws.licensemanager#ResourceType": {
   "type": "enum",
    "members": {
      "EC2_INSTANCE": {
         "target": "smithy.api#Unit",
         "traits": {
            "smithy.api#enumValue": "EC2_INSTANCE"
         }
      },
      "EC2_HOST": {
         "target": "smithy.api#Unit",
         "traits": {
```

```
                "smithy.api#enumValue": "EC2_HOST"
              }
            },
            "EC2_AMI": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "EC2_AMI"
              }
            },
            "RDS": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "RDS"
              }
            },
            "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
              "target": "smithy.api#Unit",
              "traits": {
                 "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#S3Location": {
          "type": "structure",
          "members": {
            "bucket": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
              }
            },
            "keyPrefix": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
          }
         },
        "com.amazonaws.licensemanager#ServerInternalException": {
          "type": "structure",
          "members": {
            "Message": {
```

```
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "InternalError",
            "httpResponseCode": 500
          },
          "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
          "smithy.api#error": "server",
          "smithy.api#httpError": 500
        }
      },
      "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 4096
          }
        }
      },
      "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits":
{
          "smithy.api#length": {
            "min": 0,
            "max": 400
          },
          "smithy.api#pattern": "^[\\s\\S]+$"
        }
      },
      "com.amazonaws.licensemanager#String": {
        "type": "string"
      },
      "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
          "Key": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Tag key.</p>"
```

```
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Tag value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Tag"
        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
          {
            "target":
"com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
```

```
            "TokenType": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
              }
            },
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
              }
            },
            "ExpirationTime": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
 format.</p>"
              }
            },
            "TokenProperties": {
              "target": "com.amazonaws.licensemanager#MaxSize3StringList",
              "traits": {
                "smithy.api#documentation": "<p>Data specified by the caller.</p>"
              }
            },
            "RoleArns": {
              "target": "com.amazonaws.licensemanager#ArnList",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
              }
            }
          },
          "traits": {

            "smithy.api#documentation": "<p>Describes a token.</p>"
          }
        },
        "com.amazonaws.licensemanager#TokenList": {
          "type": "list",
```

```
      "member": {
        "target": "com.amazonaws.licensemanager#TokenData"
      }
    },
    "com.amazonaws.licensemanager#TokenString": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 4096
        },
        "smithy.api#pattern": "^\\S+$"
      }
    },
    "com.amazonaws.licensemanager#TokenType": {
      "type": "enum",
      "members": {
        "REFRESH_TOKEN": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "REFRESH_TOKEN"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#UntagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#UntagResourceResponse"
      },
```

```
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                     "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanager#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UntagResourceResponse": {
        "type": "structure",
        "members": {},
```

```
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
        },
        "output": {

 "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
         }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
```

```
        "LicenseConfigurationStatus": {
          "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
          "traits": {
            "smithy.api#documentation": "<p>New status of the license configuration.</p>"
          }
        },
        "LicenseRules": {
          "target": "com.amazonaws.licensemanager#StringList",
          "traits": {

 "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
 configuration is licenseAffinityToHost.</p>"
          }
        },
        "LicenseCount": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
          }
        },
        "LicenseCountHardLimit": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
          }
        },
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>New name
of the license configuration.</p>"
          }
        },
        "Description": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>New description of the license configuration.</p>"
          }
        },
        "ProductInformationList": {
          "target": "com.amazonaws.licensemanager#ProductInformationList",
          "traits": {
            "smithy.api#documentation": "<p>New product information.</p>"
          }
        },
        "DisassociateWhenNotFound": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
```

```
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
          }
        },
        "traits":
{
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n        <li>\n        <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n        </li>\n        <li>\n        <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n        </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>The report context.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
```

```
            "traits":
{
                "smithy.api#documentation": "<p>Frequency by which reports are generated.</p>",
                "smithy.api#required": {}
            }
        },
        "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientRequestToken",
            "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                "smithy.api#required": {}
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
```

```
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
              "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
              "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n          <p>You can update the license specifications of AMIs, instances, and
hosts.\n          You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
          }
        },

        "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                "smithy.api#required": {}
              }
            },
            "AddLicenseSpecifications": {
              "target": "com.amazonaws.licensemanager#LicenseSpecifications",
              "traits": {
                "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
              }
            },
            "RemoveLicenseSpecifications": {
              "target": "com.amazonaws.licensemanager#LicenseSpecifications",
              "traits": {
                "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
              }
```

```
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
    }
},
"com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
        "S3BucketArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
              }
            },
            "SnsTopicArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
              }
            },
            "OrganizationConfiguration": {
              "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
              "traits": {
                "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
              }
            },
            "EnableCrossAccountsDiscovery": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"

        }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#UsageOperation": {
          "type": "string",
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 50
            }
          }
        },
        "com.amazonaws.licensemanager#ValidationException": {
```

```
            "type": "structure",
            "members": {
                "Message": {
                    "target": "com.amazonaws.licensemanager#Message"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

           "smithy.api#error": "client",
                "smithy.api#httpError": 400
            }
        }
    }
}
CheckoutLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
```

AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.108 aws-sdk-go-v2-service-internal-endpoint-discovery 1.10.15

1.108.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {
```

```
 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
```

```
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
```

toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi
ListLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming

```
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
```

```
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {
```

```
// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License status.
Status types.LicenseStatus

// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err
 = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
```

```
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
```

```
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
```

```
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
```

```
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
```

```
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string
```

```
 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
```

```
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
```

```
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
```

spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID

ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd

```
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
```

```
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
```

```
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
```

```
 return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go
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AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
```

```
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
```

```
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
```

```
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
     "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
        "type": "integer"
     },
     "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
        "type": "long"
     },
     "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
        "type": "operation",
        "input": {
           "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
        },
        "output": {
           "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
        },
        "errors": [
           {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
           },
           {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
           },
```

```
    {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/DeregisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of name to filter by.</p>"
```

```
            }
          },
          "Values": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
            }
          },
          "Operator": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
            "traits": {
              "smithy.api#documentation": "<p>An operator for filtering results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
          "type": "structure",
          "members": {
            "SubscriptionProviderArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
          "type": "structure",
          "members": {
            "SubscriptionProviderArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request.</p>"
              }
            },
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

           "traits": {
                "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource specified \n\t\t\tin the request.</p>"
              }
            },
            "SecretArn": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
```

```
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
               "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
          "AmiId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
          },
          "Region": {
            "target": "smithy.api#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
        },
        "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
                "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
        },
        "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
        },
        "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
        },
        "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
            }
        },
        "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
        },
```

```
            "SubscriptionProviderUpdateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider.</p>"
               }
            },
            "DualSubscription": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance.</p>"
               }
            },
            "RegisteredWithSubscriptionProvider": {
               "target": "smithy.api#String",
               "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta third-party Linux subscription provider that you've registered with License Manager.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
```

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"type": "service",
"version": "2018-05-10",
"operations": [
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
     },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
],
"traits": {
    "aws.api#service": {
        "sdkId": "License Manager Linux Subscriptions",
         "arnNamespace": "license-manager-linux-subscriptions",
        "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
        "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
```

```
            "additionalAllowedHeaders": [
              "*",
              "content-type",
              "x-amz-content-sha256",
              "x-amz-user-agent",
              "x-amzn-platform-id",
              "x-amzn-trace-id"
            ],
            "additionalExposedHeaders": [
              "x-amzn-errortype",
              "x-amzn-requestid",
              "x-amzn-trace-id"
            ]
          },
          "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
          "smithy.api#title": "AWS License Manager Linux Subscriptions",
          "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
              "Region": {
                "builtIn": "AWS::Region",
                "required": false,
                "documentation": "The AWS region used to dispatch the request.",
                "type": "String"
              },
              "UseDualStack": {
                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
                 "type": "Boolean"
              },
              "UseFIPS": {
                "builtIn": "AWS::UseFIPS",
                "required": true,
                "default": false,
                "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                "type": "Boolean"
              },
              "Endpoint": {
                "builtIn": "SDK::Endpoint",
                "required": false,
                "documentation": "Override the endpoint used to send this request",
                "type": "String"
              }
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```
        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }

    ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]

}
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
```

```
            },
            {
              "conditions": [],
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                  "ref": "Endpoint"
                },
                "properties": {},
                "headers": {}
              },
              "type": "endpoint"
            }
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          "type": "tree"

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    },
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      "conditions": [],
      "rules": [
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              "fn": "isSet",
              "argv": [
                {
                  "ref": "Region"
                }
              ]
            }
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            {
              "conditions": [
                {

      "fn": "aws.partition",
                    "argv": [
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
                "rules": [
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```
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {

                    "ref": "UseFIPS"
                        },
                        true
                      ]
                    },
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseDualStack"
                        },
                        true
                      ]
                    }

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                          "fn": "booleanEquals",
                          "argv": [
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                            {
                              "fn": "getAttr",
                              "argv": [
                                {
                                  "ref": "PartitionResult"

            },
                                "supportsFIPS"
                              ]
                            }
                          ]
                        },
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
```

```
                "argv": [

                {
                    "ref": "PartitionResult"
                },
                "supportsDualStack"
                ]
            }
            ]
        }
        ],
        "rules": [
        {
            "conditions": [],

    "rules": [
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                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
                }
            ],

            "type": "tree"
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            "type": "tree"
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            "conditions": [],
            "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",

            "type": "error"
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        "type": "tree"
    },
    {

        "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
```

```
                {
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                },
                true
              ]
            }
          ],
          "rules": [
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              "conditions": [
                {

        "fn": "booleanEquals",
                  "argv": [
                    {
                      "fn": "getAttr",
                      "argv": [
                        {
                          "ref": "PartitionResult"
                        },
                        "supportsFIPS"
                      ]
                    },
                    true

                ]
                }
              ],
              "rules": [
                {
                  "conditions": [],
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }
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                  "type": "tree"
                }
              ],
              "type": "tree"
```

```
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled
but this partition does not support FIPS",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true

    ]
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            ],
            "rules": [
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                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {

                                            "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
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                    "rules": [
                        {
                            "conditions": [],
                            "rules": [
```

```
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                    "properties": {},
                                                    "headers": {}
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                                        "type": "tree"

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                                    "type": "tree"
                                },
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                                    "conditions": [],
                                    "error": "DualStack is enabled but this partition does not support DualStack",
                                    "type": "error"
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                            "type": "tree"
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                            "conditions": [],
                            "rules": [
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                                    "conditions": [],
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"
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                    "type": "tree"
                }
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            "type": "tree"
        },
        {
```

```
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
              }
            ],
            "type": "tree"
          }
        ]
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      "smithy.rules#endpointTests": {
        "testCases": [
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {

         "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-east-1",
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            "UseFIPS": false,
            "UseDualStack": true
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        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
            }

      },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
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        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
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```
      "expect": {
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          "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }

      },
      "params": {
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            "UseFIPS": true,
            "UseDualStack": false
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        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {

        "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
```

```
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS":
false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
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```
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {

          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }

},
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
```

```
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
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        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {

      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
      },
      "params": {

 "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "Missing region",
      "expect": {
        "error": "Invalid Configuration: Missing Region"
      }
    }
```

```
            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled LinuxSubscriptionsDiscovery"

     },
            {
              "name": "Disabled",
              "value": "Disabled",
              "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
        "type": "structure",
        "members": {
          "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
              "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
```

```
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },

  {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptionInstances"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "Instances"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n          <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n          <ul>\n            <li>\n
```

\n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": " The maximum items to return in a request. "
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": " An array that contains instance objects. "
            }
          },

```
            "NextToken": {

         "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
                }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",

    "items": "Subscriptions"
            }
          }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
      "type": "structure",
      "members": {
        "Filters": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n        <p>The valid names for this filter are:</p>\n        <ul>\n
<li>\n            <p>\n              <code>Subscription</code>\n            </p>\n          </li>\n        </ul>\n
<p>The
 valid Operators for this filter are:</p>\n        <ul>\n          <li>\n            <p>\n
<code>contains</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>equals</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
            "smithy.api#length": {
              "min": 1,
              "max": 16384
            }
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
      "type": "structure",
      "members": {
        "Subscriptions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
          "traits": {
```

```
                "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
               "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
```

```
            "items": "RegisteredSubscriptionProviders"
          }
        }

    },
     "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSources": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
            "traits": {
              "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }

  },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
     },
     "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
          "RegisteredSubscriptionProviders": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
            }
          },
```

```
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {

       "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#readonly": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "resourceArn": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
             "traits": {
               "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
               "smithy.api#httpLabel": {},
               "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "EQUAL",
              "value": "Equal",
              "documentation": "Equal operator"
            },
            {
              "name": "NOT_EQUAL",
              "value": "NotEqual",
              "documentation": "Not equal operator"
            },
            {
              "name": "CONTAINS",
              "value": "Contains",
              "documentation": "Contains operator"
            }
          ],
          "smithy.api#length": {
```

```
            "min": 1,
            "max": 20
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled OrganizationIntegration"
            },
            {
              "name": "Disabled",
              "value": "Disabled",
              "documentation": "Disabled OrganizationIntegration"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
```

```
                "traits": {
                    "smithy.api#documentation":
 "<p>The Linux subscription provider that you registered.</p>"
                }
            },
            "SubscriptionProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
```

```
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
```

```
            "smithy.api#error": "client"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

    }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "InProgress",
                "value": "InProgress",
                "documentation": "InProgress status"
              },
              {
                "name": "Completed",
                "value": "Completed",
                "documentation": "Completed status"
              },
              {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
              },
              {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
              }
            ]
          }
        },

       "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
          "type": "list",
          "member": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#length": {
                "min": 1,
                "max": 100
              }
```

```
            }
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            },
            "smithy.api#uniqueItems": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
{
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [

 {
                "name": "RedHat",
                "value": "RedHat",
                "documentation": "RedHat subscription provider namespace"
              }
            ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "ACTIVE",
              "value": "ACTIVE",
              "documentation": "ACTIVE status"
            },
            {
              "name": "INVALID",
              "value": "INVALID",
```

```
    "documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
```

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
{
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
```

```
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation":
"<p>The request was denied due to request throttling.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
          "smithy.api#http": {
            "method": "DELETE",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
```

```
            "resourceArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                  "smithy.api#httpLabel": {},
                  "smithy.api#required": {}
               }
            },
            "tagKeys": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
               "traits": {

              "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                  "smithy.api#httpQuery": "tagKeys",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
         "type": "structure",
         "members": {},
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

       },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                    "smithy.api#required": {}
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowUpdate": {
                "target":
 "smithy.api#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
        },
        "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
             "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
                "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
                "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
            }

    },
        "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated data for Linux\n      subscriptions.</p>"
            }
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
        "smithy.api#error": "client"
      }
    }
```

```
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType
```

```
 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
```

```
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
```

```
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "AssociateLicense",
 }
```

```
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string
```

```
// License entitlements.
//
// This member is required.
Entitlements []types.EntitlementData

// Key fingerprint identifying the license.
//
// This member is required.
KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string
```

```
 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
```

RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader

ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
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{
"smithy": "2.0",
"shapes": {

```
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
      "type": "structure",
      "members": {
        "DomainName": {
          "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
            }
          },
          "DomainIpv4List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 2
              }
            }
          },
          "DomainCredentialsProvider": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
            }
          },
          "DomainNetworkSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "SELF_MANAGED",
              "value": "SELF_MANAGED",
              "documentation": "SELF_MANAGED type of Active Directory"
            },
            {
              "name": "AWS_MANAGED",
```

```
                "value": "AWS_MANAGED",
                "documentation": "AWS_MANAGED type of Active Directory"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Arn": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n          <note>\n            <p>Your estimated bill for charges on the number of users and related
```

costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http":
{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {

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                "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
              }
            }
          },
          "traits": {

        "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
          "type": "integer"
        },
        "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
             }
          },
          "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
          },
```

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        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

        {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                    "smithy.api#required": {}
                }
            },
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            "LicenseServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                 "traits": {
                    "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider specified in the request.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code> resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
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{
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user \n\t\t\tadministration.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
          "smithy.api#http": {
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                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
                }
            }
        },
         "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
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            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
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            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
             "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}

    }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
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        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
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user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
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        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
              "smithy.api#length": {
                "min": 1
              },

    "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Attribute": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
            }
          },
          "Operation": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
            }
          },
          "Value": {
            "target": "smithy.api#String",
            "traits":
 {
              "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
          }
        },
        "traits": {
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            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
          "type": "union",
          "members": {
            "ActiveDirectoryIdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
          "type": "structure",
          "members": {
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "Settings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
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            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of the
identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
            }
        },
        "FailureMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an identity provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
      "type": "list",
      "member": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
      "type": "structure",
      "members": {
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },
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            "Status": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                "smithy.api#required": {}
              }
            },
            "Products": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
               "traits": {
                "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                "smithy.api#required": {}
              }
            },
            "LastStatusCheckDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The date of the last status check.</p>"
              }
            },
            "StatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                "smithy.api#required": {}
              }
            },
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            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                  "smithy.api#required": {}
               }
            },

      "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "Status": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                  "smithy.api#required": {}
               }
            },
            "InstanceUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
                }
            },
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
               }
            },
            "AssociationDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
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            }
          },
          "DisassociationDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
          "smithy.api#error": "server",
          "smithy.api#httpError": 500
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
```

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"operations": [
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
     },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
     },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
```

```
        },
        {

  "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

       "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to
utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
```

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{
                "builtIn": "AWS::Region",
                "required": false,
                "documentation": "The AWS region used to dispatch the request.",
                "type": "String"
            },
            "UseDualStack": {
                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                "type": "Boolean"
            },
            "UseFIPS": {
                "builtIn": "AWS::UseFIPS",
                "required": true,
                "default": false,
                "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                "type": "Boolean"
            },
            "Endpoint": {
                "builtIn": "SDK::Endpoint",
                "required": false,
                "documentation": "Override the endpoint used to send this request",
                "type": "String"
            }
        },
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "isSet",
                        "argv": [
                            {
                                "ref": "Endpoint"
                            }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
```

```
                        {
                            "ref": "UseFIPS"
                        },
                        true
                    ]
                }
            ],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [
                {

                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [],
            "endpoint": {
                "url": {
                    "ref": "Endpoint"
                },

"properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Region"
```

```
                    }
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "aws.partition",

                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ],
                        "assign": "PartitionResult"
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },

true
                                ]
                            },
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {

"fn": "booleanEquals",
                                        "argv": [
```

```
                    true,
                    {
                      "fn": "getAttr",
                      "argv": [
                        {
                          "ref": "PartitionResult"
                        },
                        "supportsFIPS"
                      ]
                    }
                  ]
                },

              {
                  "fn": "booleanEquals",
                  "argv": [
                    true,
                    {
                      "fn": "getAttr",
                      "argv": [
                        {
                          "ref": "PartitionResult"
                        },
                        "supportsDualStack"
                      ]
                    }

            ]
                }
              ],
              "rules": [
                {
                  "conditions": [],
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }

  ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
```

```
both",
                "type": "error"
              }
            ],
            "type": "tree"
          },
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [

 {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "fn": "getAttr",
                        "argv": [

                {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      },
                      true
                    ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {

            "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                      "properties": {},
                      "headers": {}
                    },
```

```
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS is enabled but this partition does not support FIPS",
                "type": "error"

}
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],
            "rules": [
                {

    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]

     }
                        ]
                    }
                ],
                "rules": [
```

```
                                    {
                                        "conditions": [],
                                        "endpoint": {
                                            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }

                                ],
                                    "type": "tree"
                                },
                                {
                                    "conditions": [],
                                    "error": "DualStack is enabled but this partition does not support DualStack",
                                    "type": "error"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                        "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
        ]
    },
    "smithy.rules#endpointTests": {
        "testCases": [
```

```
                {
                  "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                  "expect":
{
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",

        "UseFIPS": true,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint":
{
                      "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
                    }
```

```
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS":
true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
```

```
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
        }
      },
```

```
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
         "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false

  }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
```

```
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
            }

      },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
```

```
                "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                  "error": "DualStack is enabled but this partition does not support DualStack"
                },
                "params": {
                  "Region": "us-isob-east-1",

  "UseFIPS": false,
                  "UseDualStack": true
                }
              },
              {
                "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
                  }
                },
                "params": {
                  "Region": "us-isob-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
                "expect": {

                 "endpoint": {
                    "url": "https://example.com"
                  }
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://example.com"
                  }
                },
                "params": {
```

```
                    "UseFIPS": false,
                    "UseDualStack":
false,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                  "expect": {
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                  "expect": {
                    "error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "Missing region",
                  "expect": {
                    "error": "Invalid Configuration: Missing Region"
                  }
                }
              ],
              "version": "1.0"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
          "type": "structure",
          "members": {
            "ProvisioningStatus": {
              "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
        },
        "HealthStatus": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
            "traits": {
                "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
        },
        "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Information
 about a Remote Desktop Services (RDS) license server.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
      "type": "structure",
      "members": {
        "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
            }
        },
        "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>"
            }
        },
        "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

  "traits": {
                "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
            }
        },
```

```
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
                }
            },
            "LicenseServerEndpointId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits":
 {
                    "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
                }
            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
                }
            },

           "CreationTime": {
                "target": "smithy.api#Timestamp",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

  "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "PROVISIONING",
              "value": "PROVISIONING",
              "documentation": ""
            },
            {
              "name": "PROVISIONING_FAILED",
              "value": "PROVISIONING_FAILED",
              "documentation": ""
            },
            {
              "name": "PROVISIONED",
              "value": "PROVISIONED",
              "documentation": ""
            },
            {
              "name": "DELETING",
              "value": "DELETING",
              "documentation": ""
            },
            {
              "name": "DELETION_FAILED",
              "value": "DELETION_FAILED",
              "documentation": ""

           },
            {
              "name": "DELETED",
              "value": "DELETED",
              "documentation": ""
            }
          ]
```

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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "HEALTHY",
              "value": "HEALTHY",
              "documentation": ""
            },
            {
              "name": "UNHEALTHY",
              "value": "UNHEALTHY",
              "documentation": ""
            },
            {
              "name": "NOT_APPLICABLE",
              "value": "NOT_APPLICABLE",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of license server.</p>",
              "smithy.api#required": {}
            }
          },
          "ServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
              "smithy.api#required": {}
            }
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            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {

            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
             },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
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            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "IdentityProviderSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use
 the following filters to streamline results:</p>\n        <ul>\n          <li>\n            <p>Product</p>\n          </li>\n
        <li>\n            <p>DirectoryId</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

          "traits": {
              "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources
that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
              "smithy.api#required": {}
            }
          },
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        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
      "type": "operation",
       "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },

    {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
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            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members":
{
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n
        <li>\n            <p>InstanceId</p>\n          </li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
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            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next
 token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
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            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/license-server/ListLicenseServerEndpoints"
            },

          "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "LicenseServerEndpoints"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
         "type": "structure",
         "members": {
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                  "smithy.api#range": {
                     "min": 1,
                     "max": 100
                  }
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n               <p>IdentityProviderArn</p>\n            </li>\n         </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
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    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
      "type": "structure",
      "members": {
        "LicenseServerEndpoints": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
           "traits": {
             "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
      "type":
 "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
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            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity provider.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "ProductUserSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest": {
          "type": "structure",
          "members": {
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n          </p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
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request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>Username</p>\n
</li>\n          <li>\n          <p>Domain</p>\n          </li>\n          </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating.
 This is the nextToken \n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service
 hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
        "type": "operation",
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        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
 you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

         }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
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        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
         }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListUserAssociations"
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            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "InstanceUserSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
          "type": "structure",
          "members": {
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which
 provides user-based subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {

        "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n        <ul>\n
    <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n          </li>\n
<li>\n            <p>Domain</p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
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            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummaries": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username":
{
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for this product user.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
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        },
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of a product for this user.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
          }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
          }
        },
        "Domain": {
          "target": "smithy.api#String",
          "traits": {

        "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
          }
        },
        "SubscriptionStartDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The start date of a subscription.</p>"
          }
        },
        "SubscriptionEndDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The end date of a subscription.</p>"
          }
        }
      },
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        "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
            "RdsSalCredentialsProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
```

```
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target":
 "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
          "type": "structure",
          "members": {
            "IdentityProvider": {

      "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
                "smithy.api#required": {}
              }
            },
            "Settings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
```

```
            "traits":
{
                "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation":
"<p>Metadata that describes the results of an identity provider operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
```

```
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",

        "smithy.api#error": "client",
            "smithy.api#httpError": 404
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
          "type": "structure",
          "members": {
            "SecretId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                "smithy.api#length": {
                  "min": 1
                }
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
          "type": "string",
          "traits": {
            "smithy.api#length": {

           "min": 5,
              "max": 200
            },
            "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
          "type": "structure",
          "members": {
            "Endpoint": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
             "traits": {
               "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {

  "target": "smithy.api#String"
            }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                "smithy.api#length": {
                  "min": 1
                },
                "smithy.api#required": {}
              }
            },
            "SecurityGroupId": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

             "traits": {
                "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
           },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
```

```
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n        <note>\n        <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/StartProductSubscription"
            }

    }
     },
     "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
       "type": "structure",
       "members": {
         "Username": {
           "target": "smithy.api#String",
           "traits": {
             "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
             "smithy.api#required": {}
           }
         },
         "IdentityProvider": {
           "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
           "traits": {
             "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
             "smithy.api#required": {}
           }
         },
         "Product": {
           "target": "smithy.api#String",
           "traits": {

  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n        <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n</p>",
```

```
                "smithy.api#required": {}
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user for whom to start the product \n\t\t\tsubscription.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
              }

 }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

    },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
```

```
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

    },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/StopProductSubscription"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
              }
            },
            "IdentityProvider": {
              "target":
 "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
              }
```

```
            },
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "ProductUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"

               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
         "type": "structure",
         "members": {
            "ProductUserSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                  "smithy.api#required": {}
               }

   }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StringList": {
         "type": "list",
```

```
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {

"min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
```

```
        ],
        "traits": {
          "smithy.api#documentation":
"<p>Adds tags to a resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation":
"<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
```

```
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {

             "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
            },
```

```
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

        }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {

      "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },

            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to update.</p>"
                }
            },
            "UpdateSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
```

```
                "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n                <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
        <li>\n                <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n                <p>Security
 group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n        </ul>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
              "traits": {
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
          "type": "structure",
          "members": {
            "AddSubnets": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                  "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
                  "smithy.api#required": {}
                }
              },
              "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                  "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                  "smithy.api#required": {}
                }
              },
              "SecurityGroupId": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that
 allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for
activation servers.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A parameter is not valid.</p>",
          "smithy.api#error": "client"
        }
      }
    }
}
```


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ListReceivedLicenses
Initialize stack step
spanInitializeStart

```
 RegisterServiceMetadata
 legacyEndpointContextSetter
 SetLogger
 spanInitializeEnd
Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 Retry
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
```

```
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpResponseCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
      },
      {
        "id": "Service",
        "namespace": "*"
      }
    ]
  },
  "shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
      "type": "service",
      "version": "2018-08-01",
      "operations": [
        {
          "target": "com.amazonaws.licensemanager#AcceptGrant"
```

```
        },

{
            "target": "com.amazonaws.licensemanager#CheckInLicense"
        },
        {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
        },
        {
            "target": "com.amazonaws.licensemanager#CheckoutLicense"
        },
        {
            "target": "com.amazonaws.licensemanager#CreateGrant"
        },
        {
            "target": "com.amazonaws.licensemanager#CreateGrantVersion"
        },
        {
            "target": "com.amazonaws.licensemanager#CreateLicense"
        },
        {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
        },
        {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
        },
        {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
         },
        {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
        },
        {
            "target": "com.amazonaws.licensemanager#CreateToken"
        },
        {
            "target": "com.amazonaws.licensemanager#DeleteGrant"
        },
        {
            "target": "com.amazonaws.licensemanager#DeleteLicense"
        },
        {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
        },
        {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
        },
        {
```

```
        "target": "com.amazonaws.licensemanager#DeleteToken"
      },
      {
        "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

    },
      {
        "target": "com.amazonaws.licensemanager#GetAccessToken"
      },
      {
        "target": "com.amazonaws.licensemanager#GetGrant"
      },
      {
        "target": "com.amazonaws.licensemanager#GetLicense"
      },
      {
        "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
      },
      {
        "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
      },
      {
        "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
      },
      {
        "target": "com.amazonaws.licensemanager#GetLicenseUsage"
      },
      {
        "target": "com.amazonaws.licensemanager#GetServiceSettings"
      },
      {
        "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
       },
      {
        "target": "com.amazonaws.licensemanager#ListDistributedGrants"
      },
      {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
      },
      {
        "target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
      },
      {
        "target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
      },
      {
        "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
      },
```

```
{
   "target": "com.amazonaws.licensemanager#ListLicenses"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

  "target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
   "target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
   "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
   "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
   "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
   "target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
   "target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
   "target": "com.amazonaws.licensemanager#ListTokens"
},
{
   "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
 },
{
   "target": "com.amazonaws.licensemanager#RejectGrant"
},
{
   "target": "com.amazonaws.licensemanager#TagResource"
},
{
   "target": "com.amazonaws.licensemanager#UntagResource"
},
{
   "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
},
{
   "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
```

```
        },
        {
          "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
        },
        {
          "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager",
          "arnNamespace": "license-manager",
          "cloudFormationName": "LicenseManager",
          "cloudTrailEventSource": "licensemanager.amazonaws.com",
          "endpointPrefix": "license-manager"
        },
        "aws.auth#sigv4": {
          "name": "license-manager"
        },
        "aws.protocols#awsJson1_1": {},
        "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software vendors across multiple \n        Amazon Web Services accounts and on-premises servers.</p>",
        "smithy.api#title": "AWS License Manager",
        "smithy.api#xmlNamespace": {
          "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
        },
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send
```

this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",


```
            "type": "Boolean"
        },
        "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
        }
    },
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]

                }
                ],
                "type": "tree",
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },
                                    true
                                ]
                            }
                        ],
                        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                        "type": "error"
                    },
                    {

 "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
```

```
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
        ],
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
        "type": "error"
      },
      {
        "conditions": [],
        "endpoint": {
          "url": {
            "ref": "Endpoint"
          },
          "properties": {},
          "headers": {}
        },
        "type": "endpoint"
      }
    ]
  },
  {
    "conditions": [
      {
        "fn": "isSet",
        "argv": [
          {
            "ref": "Region"
          }
        ]
      }
    ],
    "type": "tree",
    "rules": [
      {
        "conditions": [
          {
            "fn": "aws.partition",
            "argv": [
              {
                "ref": "Region"
              }
            ],
            "assign": "PartitionResult"
          }
        ],
        "type": "tree",
```

```
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref":
"UseFIPS"
                                    },
                                    true
                                ]
                            },
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]
                            }
                        ],
                        "type": "tree",
                        "rules": [
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            true,
                                            {
                                                "fn": "getAttr",
                                                "argv": [
                                                    {
                                                        "ref": "PartitionResult"
                                                    },
                                                    "supportsFIPS"
                                                ]

                                            }
                                        ]
                                    },
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            true,
                                            {
```

```
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },

    "supportsDualStack"
                                        ]
                                    }
                                ]
                            }
                        ],
                        "type": "tree",
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}

                            },
                                "type": "endpoint"
                            }
                        ]
                    },
                    {
                        "conditions": [],
                        "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                        "type": "error"
                    }
                ]
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",

                  "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true
                        ]
                    }
                ],
```

```
                "type": "tree",
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          true,

                {
                              "fn": "getAttr",
                              "argv": [
                                {
                                  "ref": "PartitionResult"
                                },
                                "supportsFIPS"
                              ]
                            }
                          ]
                        }
                      ],
                      "type": "tree",
                      "rules": [

                {
                          "conditions": [],
                          "endpoint": {
                            "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}
                          },
                          "type": "endpoint"
                        }
                      ]
                    },
                    {
                      "conditions": [],
                      "error": "FIPS is enabled but this
partition does not support FIPS",
                      "type": "error"
                    }
                  ]
                },
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
```

```
                {
                  "ref": "UseDualStack"
                },
                true
              ]
            }
          ],
          "type": "tree",
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    true,
                    {
                      "fn": "getAttr",
                      "argv": [
                        {
                          "ref": "PartitionResult"
                        },

"supportsDualStack"
                        ]
                      }
                    ]
                  }
                ],
                "type": "tree",
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                      "properties": {},
                      "headers": {}

          },
                    "type": "endpoint"
                  }
                ]
            },
            {
              "conditions": [],
              "error": "DualStack is enabled but this partition does not support DualStack",
              "type": "error"
            }
```

```
                        ]
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                             "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ]
            }
        ]
    },
    {
        "conditions": [],
        "error": "Invalid Configuration: Missing Region",
        "type": "error"
    }
  ]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager.af-south-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "af-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ap-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "ap-east-1",
        "UseFIPS": false,
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            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-northeast-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-northeast-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-northeast-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-northeast-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-northeast-3.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-northeast-3",
            "UseFIPS": false,
            "UseDualStack": false
          }

    },
        {
          "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-south-1.amazonaws.com"
```

```
            }
          },
          "params": {
            "Region": "ap-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-1.amazonaws.com"

}
          },
          "params": {
            "Region": "ap-southeast-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
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          "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-southeast-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-3.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-southeast-3",
            "UseFIPS": false,
            "UseDualStack": false
          }
```

```
    },
    {
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      "expect": {
        "endpoint": {
          "url": "https://license-manager.ca-central-1.amazonaws.com"
        }
      },

     "params": {
        "Region": "ca-central-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
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      "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-central-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-central-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-north-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-south-1.amazonaws.com"
        }
```

```
      },
      "params": {
        "Region":
"eu-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
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      "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-west-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-west-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
      "expect": {

      "endpoint": {
          "url": "https://license-manager.eu-west-2.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-west-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-west-3.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-west-3",
        "UseFIPS": false,

   "UseDualStack": false
      }
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        },
        {
          "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.me-south-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "me-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.sa-east-1.amazonaws.com"
             }
          },
          "params": {
            "Region": "sa-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }

    },
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-east-1.amazonaws.com"
            }
          },
```

```
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-east-2.amazonaws.com"
        }

     },
      "params": {
        "Region": "us-east-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-east-2.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-2",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-west-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-west-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
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      "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-west-1.amazonaws.com"
        }
      },
      "params": {

    "Region": "us-west-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-west-2.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-west-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

"expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-west-2.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-west-2",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-east-1.api.aws"
        }
      },
      "params": {
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                "Region": "us-east-1",
                "UseFIPS": true,

                "UseDualStack": true
              }
            },
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              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
                }
              },
              "params": {
                "Region": "cn-northwest-1",
                "UseFIPS": false,
                "UseDualStack": false

    }
            },
            {
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      "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
         }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },

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      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
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```
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-gov-west-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-west-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-west-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
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                "url": "https://license-manager-fips.us-gov-east-1.api.aws"
              }
            },

        "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.us-gov-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
                }
              },
              "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
              },
              "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                 "UseDualStack": true
              }
            },
```

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    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled
but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },

   {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
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      }
    },
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      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },

"params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

  "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
```

```
                    }
                  },
                  "params": {
                    "UseFIPS": false,

        "UseDualStack": false,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                  "expect": {
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                  "expect": {
                    "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "Missing region",
                  "expect": {
                    "error": "Invalid Configuration: Missing Region"
                  }
                }
              ],
              "version": "1.0"
            }
          }
        },
        "com.amazonaws.licensemanager#AcceptGrant": {
          "type": "operation",
          "input": {
```

```
            "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

    },
        "output": {
            "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"

      }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
      },
      "com.amazonaws.licensemanager#AcceptGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
```

```
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant
ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#AccessDeniedException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {

  "code": "ServiceAccessDenied",
          "httpResponseCode": 401
        },
        "smithy.api#documentation": "<p>Access to resource denied.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 401
      }
    },
    "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
      "type": "enum",
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      "members": {
        "DISTRIBUTED_GRANTS_ONLY": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
          }
        },
        "ALL_GRANTS_PERMITTED_BY_ISSUER": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#AllowedOperation": {

   "type": "enum",
      "members": {
        "CREATE_GRANT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "CreateGrant"
          }
        },
        "CHECKOUT_LICENSE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "CheckoutLicense"
          }
        },
        "CHECKOUT_BORROW_LICENSE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "CheckoutBorrowLicense"
          }
        },
        "CHECK_IN_LICENSE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "CheckInLicense"
          }
        },
        "EXTEND_CONSUMPTION_LICENSE":
{
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "ExtendConsumptionLicense"
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            }
          },
          "LIST_PURCHASED_LICENSES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ListPurchasedLicenses"
            }
          },
          "CREATE_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CreateToken"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max":
7
          }
        }
      },
      "com.amazonaws.licensemanager#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 2048
          },
          "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
      },
      "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Arn"
        }
      },
      "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
```

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        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError":
{
            "code": "AuthorizationFailure",
            "httpResponseCode": 403
          },
          "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n        policy associated with this account.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 403
        }
      },
      "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
          "LastRunTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
      },

    "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
          "smithy.api#default": false
        }
      },
      "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
          "AllowEarlyCheckIn": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
              "smithy.api#required": {}
            }
          },
```

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            "MaxTimeToLiveInMinutes": {
               "target": "com.amazonaws.licensemanager#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                  "smithy.api#required": {}
               }
            }

},
         "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
         }
      },
      "com.amazonaws.licensemanager#BoxBoolean": {
         "type": "boolean"
      },
      "com.amazonaws.licensemanager#BoxInteger": {
         "type": "integer"
      },
      "com.amazonaws.licensemanager#BoxLong": {
         "type": "long"
      },
      "com.amazonaws.licensemanager#CheckInLicense": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"

       },
            {
               "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
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                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
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        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
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{
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
            "smithy.api#required": {}
          }
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementDataList",
          "traits": {
            "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
            "smithy.api#required": {}
          }
        },
        "DigitalSignatureMethod": {
          "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
          "traits": {
            "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
            "smithy.api#required": {}
          }
        },
        "NodeId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Node ID.</p>"
          }
        },
        "CheckoutMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
            "smithy.api#documentation": "<p>Information about constraints.</p>"
          }
        },
        "ClientToken": {
          "target": "com.amazonaws.licensemanager#ClientToken",
          "traits": {
            "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
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        }
      },
      "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License consumption token.</p>"
            }
          },
          "EntitlementsAllowed":
{
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
          },
          "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
              "smithy.api#documentation": "<p>Signed token.</p>"
            }
          },
          "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
            }
          },
          "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
            }
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        },
        "CheckoutMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
            "smithy.api#documentation": "<p>Information about constraints.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CheckoutLicense": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target":
"com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n        <p>If the account that created the license is the same that is performing the check out, you must\n        specify the account as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",

    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
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idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            }
        },
        "traits": {

          "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseResponse": {
        "type": "structure",
        "members": {
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>"
                }
            },
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },
            "EntitlementsAllowed": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
                }
            },
            "SignedToken": {
                "target": "com.amazonaws.licensemanager#SignedToken",
                "traits": {
                    "smithy.api#documentation": "<p>Signed token.</p>"
                }
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            },
            "NodeId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
              }
            },
            "IssuedAt": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
              }
            },
            "Expiration": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
              }
            },
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#CheckoutType": {
          "type": "enum",
          "members": {
            "PROVISIONAL": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "PROVISIONAL"
              }
            },
            "PERPETUAL": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "PERPETUAL"
              }
             }
          }
        },
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    "com.amazonaws.licensemanager#ClientRequestToken": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 36
        }
      }
    },
    "com.amazonaws.licensemanager#ClientToken": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 2048
        },
        "smithy.api#pattern": "^\\S+$"
      }
    },
    "com.amazonaws.licensemanager#ConflictException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "ConflictException",
          "httpResponseCode":
409
        },
        "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 409
      }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
      "type": "structure",
      "members": {
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
          }
        },
        "ConsumedLicenses": {
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            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
            }
          }
        },

"traits": {
          "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
      },
      "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
      },
      "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
          "RenewType": {
            "target": "com.amazonaws.licensemanager#RenewType",
            "traits": {
              "smithy.api#documentation": "<p>Renewal frequency.</p>"
            }
          },
          "ProvisionalConfiguration": {
            "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
             }
          },
          "BorrowConfiguration": {
            "target": "com.amazonaws.licensemanager#BorrowConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
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        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
 license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
 organizational unit (OU). For more
  information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
 licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
 idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
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            "traits": {
                "smithy.api#documentation": "<p>Grant name.</p>",
                "smithy.api#required": {}

    }
        },
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "Principals": {
            "target": "com.amazonaws.licensemanager#PrincipalArnList",
            "traits": {
                "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN):</p>\n <ul>\n <li>\n <p>An Amazon Web Services account, which includes only the account specified.</p>\n </li>\n </ul>\n <ul>\n <li>\n <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n </li>\n </ul>\n <ul>\n
        <li>\n <p>An organization, which will include all accounts across your organization.</p>\n </li>\n </ul>",
                "smithy.api#required": {}
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                "smithy.api#required": {}
            }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },

    "com.amazonaws.licensemanager#CreateGrantResponse": {
      "type": "structure",
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      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CreateGrantVersion":
{
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
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            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
         }
      },
      "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
         "type": "structure",
         "members": {
            "ClientToken": {
               "target": "com.amazonaws.licensemanager#ClientToken",
               "traits": {
                  "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",

   "smithy.api#required": {}
               }
            },
            "GrantArn": {
               "target": "com.amazonaws.licensemanager#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                  "smithy.api#required": {}
               }
            },
            "GrantName": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Grant name.</p>"
               }
            },
            "AllowedOperations": {
               "target": "com.amazonaws.licensemanager#AllowedOperationList",
               "traits": {
                  "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
               }
            },
            "Status": {
               "target": "com.amazonaws.licensemanager#GrantStatus",
```

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            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
```

```
        },
        "traits":
{
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
```

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        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n            <p>A license configuration is an abstraction of a customer license agreement that can be\n            consumed and enforced by License Manager. Components include specifications for the license\n            type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n            Dedicated Instance, Dedicated Host, or
 all of these), license affinity  to host (how long a \n            license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
          },
          "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
            }
          },
          "LicenseRules": {
            "target":
 "com.amazonaws.licensemanager#StringList",
            "traits": {
              "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n          <li>\n            <p>\n              <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
        <code>licenseAffinityToHost</code> |\n            <code>maximumCores</code> |
<code>minimumCores</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n            <code>maximumCores</code> |
<code>minimumCores</code> |\n            <code>maximumSockets</code> | <code>minimumSockets</code> |\n
        <code>maximumVcpus</code> | <code>minimumVcpus</code>\n            </p>\n          </li>\n
<li>\n
  <p>\n            <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n            <code>maximumSockets</code> |
<code>minimumSockets</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n            <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n            </p>\n          </li>\n        </ul>\n        <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"
            }
          },

  "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
```

```
            }
          },
          "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>Product information.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
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                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n         For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext":
{
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
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the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

          "traits": {
                    "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
```

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            {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
          }
        },
        "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
          "type": "structure",
          "members": {
            "ReportGeneratorName":
{
              "target": "com.amazonaws.licensemanager#ReportGeneratorName",
              "traits": {
                "smithy.api#documentation": "<p>Name of the report generator.</p>",
                "smithy.api#required": {}
              }
            },
            "Type": {
              "target": "com.amazonaws.licensemanager#ReportTypeList",
              "traits": {
                "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be generated:</p>\n <ul>\n <li>\n <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n </li>\n <li>\n <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n </li>\n </ul>",
                "smithy.api#required": {}

          }
            },
            "ReportContext": {
              "target": "com.amazonaws.licensemanager#ReportContext",
              "traits": {
                "smithy.api#documentation": "<p>Defines the type of license configuration the report generator tracks.</p>",
                "smithy.api#required": {}
              }
            },
            "ReportFrequency": {
              "target": "com.amazonaws.licensemanager#ReportFrequency",
              "traits": {
```

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                "smithy.api#documentation": "<p>Frequency by which reports are generated.  Reports can be
generated daily, monthly, or weekly.</p>",
                "smithy.api#required": {}
              }
            },
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientRequestToken",
              "traits": {
                "smithy.api#documentation": "<p>Unique,
 case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            },
            "Description": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanager#TagList",
              "traits": {
                "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
          "type": "structure",
          "members": {
            "LicenseManagerReportGeneratorArn":
{
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
generator.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#CreateLicenseRequest": {
          "type": "structure",
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        "members": {
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product
name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits": {
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region for the license.</p>",
                    "smithy.api#required": {}

    }
            },
            "Validity": {
                "target": "com.amazonaws.licensemanager#DatetimeRange",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
```

```
            "traits": {
              "smithy.api#documentation": "<p>License entitlements.</p>",
              "smithy.api#required": {}
            }
          },
          "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License beneficiary.</p>",
              "smithy.api#required": {}
            }
          },
          "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license.</p>"
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseResponse": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
```

```
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseStatus",
          "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
          }
        },
        "Version": {
           "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersion": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#ConflictException"
         },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits":
{
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region of the license.</p>",
                    "smithy.api#required": {}
                }
            },
```

```
            "Validity": {
              "target": "com.amazonaws.licensemanager#DatetimeRange",
              "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-UTC format.</p>",
                "smithy.api#required": {}
              }
            },
            "LicenseMetadata": {
              "target": "com.amazonaws.licensemanager#MetadataList",
              "traits": {
                "smithy.api#documentation": "<p>Information about the license.</p>"
              }
            },
            "Entitlements": {
              "target": "com.amazonaws.licensemanager#EntitlementList",
              "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
              }
            },
            "ConsumptionConfiguration": {
              "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
              "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage.</p>",
                "smithy.api#required": {}
              }
            },

  "Status": {
              "target": "com.amazonaws.licensemanager#LicenseStatus",
              "traits": {
                "smithy.api#documentation": "<p>License status.</p>",
                "smithy.api#required": {}
              }
            },
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientToken",
              "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            },
            "SourceVersion": {
              "target": "com.amazonaws.licensemanager#String",
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            "traits": {
                "smithy.api#documentation": "<p>Current version of the license.</p>"
            }
          }
        },
        "traits": {

"smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>License ARN.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>New version of the license.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
{}
        }
      },
      "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },

        {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n          <p>A refresh token is a JWT token used to get an access token. With an access token,\n          you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n          call License Manager to manage the specified license.</p>"
          }
        },
        "com.amazonaws.licensemanager#CreateTokenRequest": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits":
{
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n          JWT token.</p>",
                "smithy.api#required": {}
              }
            },
            "RoleArns": {
              "target": "com.amazonaws.licensemanager#ArnList",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n          License Manager does not check whether the roles are in use.</p>"
              }
```

```
            },
            "ExpirationInDays": {
               "target": "com.amazonaws.licensemanager#Integer",
               "traits": {
                  "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The
default is 365 days.</p>"
               }
            },
            "TokenProperties": {
               "target": "com.amazonaws.licensemanager#MaxSize3StringList",
               "traits": {
                  "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The
data is mapped\n          to the amr claim of the JWT token.</p>"
               }
            },
            "ClientToken": {
               "target": "com.amazonaws.licensemanager#ClientToken",
               "traits": {
                  "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanager#CreateTokenResponse": {
         "type": "structure",
         "members": {
            "TokenId": {
               "target": "com.amazonaws.licensemanager#String",

               "traits": {
                  "smithy.api#documentation": "<p>Token ID.</p>"
               }
            },
            "TokenType": {
               "target": "com.amazonaws.licensemanager#TokenType",
               "traits": {
                  "smithy.api#documentation": "<p>Token type.</p>"
               }
            },
            "Token": {
               "target": "com.amazonaws.licensemanager#TokenString",
               "traits": {
                  "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
               }
```

```
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse": {
```

```
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

```
},
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
         }
      },
      "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
         },

      "errors": [
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n         <p>You cannot
delete a license configuration that is in use.</p>"
         }
```

```
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
      "type": "structure",
      "members":
{
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>ID of the license configuration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
```

```
            {
               "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
             }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n         <p>This action deletes the report generator, which stops it from generating future reports.\n         The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
         }
      },
      "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
         "type": "structure",
         "members": {
            "LicenseManagerReportGeneratorArn": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {

  "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
         "type": "structure",
         "members": {},
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanager#DeleteLicenseRequest": {
         "type": "structure",
         "members": {
            "LicenseArn": {
               "target": "com.amazonaws.licensemanager#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                  "smithy.api#required": {}
```

```
            }
          },
          "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the license.</p>",
              "smithy.api#required":
{}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          },
          "DeletionDate": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteToken": {
        "type": "operation",
         "input": {
          "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
```

```
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },

    {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
        }
      },
      "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
          "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token ID.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}

      }
      },
      "com.amazonaws.licensemanager#DigitalSignatureMethod": {
```

```
        "type": "enum",
        "members": {
          "JWT_PS384": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "JWT_PS384"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#Entitlement": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement name.</p>",
              "smithy.api#required": {}
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
            }
          },
          "MaxCount": {
            "target": "com.amazonaws.licensemanager#Long",
            "traits": {
              "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
            }
          },
          "Overage": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
            }
          },
          "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementUnit",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement unit.</p>",
              "smithy.api#required": {}
            }
          },
          "AllowCheckIn": {
            "target":
```

```
"com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementData": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement
data value.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "enum",
        "members": {
```

```
            "COUNT": {
               "target": "smithy.api#Unit",
               "traits": {

"smithy.api#enumValue": "Count"
               }
            },
            "NONE": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "None"
               }
            },
            "SECONDS": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "Seconds"
               }
            },
            "MICROSECONDS": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "Microseconds"
               }
            },
            "MILLISECONDS": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "Milliseconds"
               }
            },
            "BYTES": {
               "target": "smithy.api#Unit",
                "traits": {
                  "smithy.api#enumValue": "Bytes"
               }
            },
            "KILOBYTES": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "Kilobytes"
               }
            },
            "MEGABYTES": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "Megabytes"
               }
```

```
        },
        "GIGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes"
          }
        },
        "TERABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabytes"
          }
        },
        "BITS":
{
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits"
          }
        },
        "KILOBITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits"
          }
        },
        "MEGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabits"
          }
        },
        "GIGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits"
          }
        },
        "TERABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits"

    }
        },
        "PERCENT": {
          "target": "smithy.api#Unit",
          "traits": {
```

```
        "smithy.api#enumValue": "Percent"
      }
    },
    "BYTES_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Bytes/Second"
      }
    },
    "KILOBYTES_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Kilobytes/Second"
      }
    },
    "MEGABYTES_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Megabytes/Second"
      }
    },
    "GIGABYTES_PER_SECOND": {
      "target": "smithy.api#Unit",
       "traits": {
        "smithy.api#enumValue": "Gigabytes/Second"
      }
    },
    "TERABYTES_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Terabytes/Second"
      }
    },
    "BITS_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Bits/Second"
      }
    },
    "KILOBITS_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Kilobits/Second"
      }
    },
    "MEGABITS_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
```

```
                "smithy.api#enumValue":
"Megabits/Second"
            }
          },
          "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Gigabits/Second"
            }
          },
          "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Terabits/Second"
            }
          },
          "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Count/Second"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#EntitlementList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Entitlement"
        }
      },
      "com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },
      "com.amazonaws.licensemanager#EntitlementUnit": {
        "type": "enum",
        "members": {
          "COUNT": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Count"
            }
          },
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "SECONDS":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Seconds"
            }
          },
          "MICROSECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Microseconds"
            }
          },
          "MILLISECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Milliseconds"
            }
          },
          "BYTES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Bytes"
            }
          },
          "KILOBYTES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Kilobytes"
             }
          },
          "MEGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Megabytes"
            }
          },
```

```
"GIGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabytes"
    }
},
"TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes"
    }
},
"BITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bits"
    }
},
"KILOBITS": {
    "target": "smithy.api#Unit",
    "traits": {

     "smithy.api#enumValue": "Kilobits"
    }
},
"MEGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabits"
    }
},
"GIGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabits"
    }
},
"TERABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabits"
    }
},
"PERCENT": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Percent"
    }
```

```
            },
            "BYTES_PER_SECOND": {
              "target":
"smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Bytes/Second"
              }
            },
            "KILOBYTES_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
              }
            },
            "MEGABYTES_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
              }
            },
            "GIGABYTES_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
              }
            },
            "TERABYTES_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {

"smithy.api#enumValue": "Terabytes/Second"
              }
            },
            "BITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Bits/Second"
              }
            },
            "KILOBITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
              }
            },
            "MEGABITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
```

```
            "smithy.api#enumValue": "Megabits/Second"
          }
        },
        "GIGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits/Second"
          }
        },

   "TERABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits/Second"
          }
        },
        "COUNT_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Count/Second"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#EntitlementUsage": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Entitlement usage name.</p>",
            "smithy.api#required": {}
          }
        },
        "ConsumedValue": {
          "target": "com.amazonaws.licensemanager#String",

       "traits": {
            "smithy.api#documentation": "<p>Resource usage consumed.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxCount": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
          }
        },
```

```
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

```
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
          }
        },
        "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
          "type": "structure",
          "members": {
            "LicenseConsumptionToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>",
                "smithy.api#required": {}

     }
            },
            "DryRun": {
              "target": "com.amazonaws.licensemanager#Boolean",
              "traits": {
                "smithy.api#default": false,
                "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
          "type": "structure",
          "members": {
            "LicenseConsumptionToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
              }
            },

            "Expiration": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
              }
            }
          },
          "traits": {
```

```
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#FailedDependencyException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            },
            "ErrorCode": {
                "target": "com.amazonaws.licensemanager#String"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FailedDependency",
                "httpResponseCode": 424
            },
            "smithy.api#documentation":
 "<p>A dependency required to run the API is missing.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 424
        }
    },
    "com.amazonaws.licensemanager#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#FilterName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanager#FilterValues",
                "traits": {
                    "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only
specify one value for the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter
 name and value pair that is used to return more specific results from a\n          describe operation. Filters can be used
to match a set of resources by specific criteria,\n          such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanager#FilterLimitExceededException": {
```

```
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n         are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
            }
        },
        "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
{
        "type": "structure",
        "members": {
            "AccessToken": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Temporary access token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

      },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
```

```
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
      }
    },
    "com.amazonaws.licensemanager#GetGrantRequest": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetGrantResponse": {
      "type": "structure",
      "members": {
        "Grant": {
          "target": "com.amazonaws.licensemanager#Grant",
          "traits": {
            "smithy.api#documentation": "<p>Grant details.</p>"
          }
        }
      },
      "traits": {

    "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicense": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
      },
      "output": {
```

```
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"

    },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
      }
    },
    "com.amazonaws.licensemanager#GetLicenseConfiguration": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
{
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                 }
            },
            "Description": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",

           "traits": {
                "smithy.api#documentation": "<p>Number of available licenses.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License configuration status.</p>"
            }

    },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
            }
```

```
            },
            "ConsumedLicenseSummaryList": {
              "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
              }
            },
            "ManagedResourceSummaryList": {
              "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanager#TagList",
               "traits": {
                "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
              }
            },
            "ProductInformationList": {
              "target": "com.amazonaws.licensemanager#ProductInformationList",
              "traits": {
                "smithy.api#documentation": "<p>Product information.</p>"
              }
            },
            "AutomatedDiscoveryInformation": {
              "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
              "traits": {
                "smithy.api#documentation": "<p>Automated discovery information.</p>"
              }
            },
            "DisassociateWhenNotFound": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#GetLicenseConversionTask": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
          },
```

```
        "output": {
          "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {

 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information
on.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
```

```
            }
        },
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
            }
        },
        "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information
 about the license type converted from.</p>"
            }
        },
        "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
        },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
            }
        },
        "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
        },
        "EndTime": {
```

```
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

         },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
```

```
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
          }
        },
        "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
          "type": "structure",
          "members": {
            "LicenseManagerReportGeneratorArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                "smithy.api#required":
{}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
          "type": "structure",
          "members": {
            "ReportGenerator": {
              "target": "com.amazonaws.licensemanager#ReportGenerator",
              "traits": {
                "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#GetLicenseRequest": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {

 "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
              }
            },
            "Version": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
```

```
            "smithy.api#documentation": "<p>License version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
      "type": "structure",
      "members": {
        "License": {
          "target": "com.amazonaws.licensemanager#License",
          "traits": {
            "smithy.api#documentation": "<p>License details.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },

  "com.amazonaws.licensemanager#GetLicenseUsage": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
```

```
  "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
          }
        },
        "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
          "type": "structure",
          "members": {
            "LicenseUsage": {
              "target":
"com.amazonaws.licensemanager#LicenseUsage",
              "traits": {
                "smithy.api#documentation": "<p>License usage details.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#GetServiceSettings": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
          },
          "errors": [
            {
```

```
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n         and so on.</p>"

 }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n         cross-account discovery.</p>"
                }
            },
```

```
        "EnableCrossAccountsDiscovery": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
          }

      },
        "LicenseManagerResourceShareArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#Grant": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
          }
        },
        "GrantName": {

 "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant name.</p>",
            "smithy.api#required": {}
          }
        },
        "ParentArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Parent ARN.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>License ARN.</p>",
```

```
            "smithy.api#required": {}
          }
        },
        "GranteePrincipalArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {

"smithy.api#documentation": "<p>The grantee principal ARN.</p>",
            "smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the grant.</p>",
            "smithy.api#required": {}
          }
        },
        "GrantStatus": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>",
            "smithy.api#required": {}
          }
        },
        "StatusReason": {
          "target": "com.amazonaws.licensemanager#StatusReasonMessage",
          "traits": {
            "smithy.api#documentation": "<p>Grant status reason.</p>"
           }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>",
            "smithy.api#required": {}
          }
        },
        "GrantedOperations": {
          "target": "com.amazonaws.licensemanager#AllowedOperationList",
          "traits": {
            "smithy.api#documentation": "<p>Granted operations.</p>",
            "smithy.api#required": {}
          }
        },
        "Options": {
          "target": "com.amazonaws.licensemanager#Options",
          "traits": {
```

```
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation":
"<p>Describes a grant.</p>"
          }
        },
        "com.amazonaws.licensemanager#GrantList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#Grant"
          }
        },
        "com.amazonaws.licensemanager#GrantStatus": {
          "type": "enum",
          "members": {
            "PENDING_WORKFLOW": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "PENDING_WORKFLOW"
              }
            },
            "PENDING_ACCEPT": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "PENDING_ACCEPT"
              }
            },
            "REJECTED": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "REJECTED"

              }
            },
            "ACTIVE": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "ACTIVE"
              }
            },
            "FAILED_WORKFLOW": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
              }
```

```
        },
        "DELETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DELETED"
          }
        },
        "PENDING_DELETE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "PENDING_DELETE"
          }
        },
        "DISABLED": {
          "target": "smithy.api#Unit",
          "traits":
{
            "smithy.api#enumValue": "DISABLED"
          }
        },
        "WORKFLOW_COMPLETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "WORKFLOW_COMPLETED"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
          }
        },
        "LicenseName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License name.</p>"
          }

 },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product name.</p>"
```

```
        }
      },
      "ProductSKU": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Product SKU.</p>"
        }
      },
      "Issuer": {
        "target": "com.amazonaws.licensemanager#IssuerDetails",
        "traits": {
          "smithy.api#documentation": "<p>Granted license issuer.</p>"
        }
      },
      "HomeRegion": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

       }
      },
      "Status": {
        "target": "com.amazonaws.licensemanager#LicenseStatus",
        "traits": {
          "smithy.api#documentation": "<p>Granted license status.</p>"
        }
      },
      "Validity": {
        "target": "com.amazonaws.licensemanager#DatetimeRange",
        "traits": {
          "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
        }
      },
      "Beneficiary": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
        }
      },
      "Entitlements": {
        "target": "com.amazonaws.licensemanager#EntitlementList",
         "traits": {
          "smithy.api#documentation": "<p>License entitlements.</p>"
        }
      },
      "ConsumptionConfiguration": {
        "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>Granted license metadata.</p>"
            }
        },
        "CreateTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

  }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Version of the granted license.</p>"
            }
        },
        "ReceivedMetadata": {
            "target": "com.amazonaws.licensemanager#ReceivedMetadata",
            "traits": {
                "smithy.api#documentation": "<p>Granted license received metadata.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
      }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#GrantedLicense"
      }
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
```

```
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
          }
        },
        "com.amazonaws.licensemanager#Integer": {
          "type": "integer"
        },
        "com.amazonaws.licensemanager#InvalidParameterValueException": {
          "type": "structure",
          "members": {
            "Message": {
              "target": "com.amazonaws.licensemanager#Message"
            }
          },
          "traits": {
            "aws.protocols#awsQueryError": {
              "code": "InvalidParameterValueProvided",
              "httpResponseCode": 400
            },
            "smithy.api#documentation":
 "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
          }
        },
        "com.amazonaws.licensemanager#InvalidResourceStateException": {
          "type": "structure",
          "members": {
            "Message": {
              "target": "com.amazonaws.licensemanager#Message"
            }
          },
          "traits": {
            "aws.protocols#awsQueryError": {
              "code": "InvalidResourceState",
              "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its state. </p>\n          <p>For example, you cannot allocate a license to an instance in the process of shutting\n down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
          }
        },

       "com.amazonaws.licensemanager#InventoryFilter": {
          "type": "structure",
          "members": {
```

```
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the filter.</p>",
            "smithy.api#required": {}
          }
        },
        "Condition": {
          "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
          "traits": {
            "smithy.api#documentation": "<p>Condition of the filter.</p>",
            "smithy.api#required": {}
          }
        },
        "Value": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Value of the filter.</p>"
          }
        }

},
    "traits": {
      "smithy.api#documentation": "<p>An inventory filter.</p>"
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
      "EQUALS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EQUALS"
        }
      },
      "NOT_EQUALS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "NOT_EQUALS"
        }
      },
      "BEGINS_WITH": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "BEGINS_WITH"
        }
      },
      "CONTAINS": {
```

```
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "CONTAINS"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage
 of sign and verify, \n         and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>"
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

```
                "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n          and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
              }
            },
            "KeyFingerprint": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
          }
        },
        "com.amazonaws.licensemanager#License": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
              }
            },
            "LicenseName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {

             "smithy.api#documentation": "<p>License name.</p>"
              }
            },
            "ProductName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
              }
            },
            "ProductSKU": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
              }
            },
            "Issuer": {
              "target": "com.amazonaws.licensemanager#IssuerDetails",
              "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>"
```

```
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

        "smithy.api#documentation": "<p>Home Region of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>"
            }
        },
        "Entitlements": {

   "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>License metadata.</p>"
            }
        },
        "CreateTime": {
```

```
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>License
creation time.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
          "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
            }
          },
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          },
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
          },
          "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
              "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
```

```
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license configuration.</p>"
            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

        }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
            }
        },
        "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
            }
        },
        "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
                "smithy.api#documentation": "<p>Product information.</p>"
            }
        },
        "AutomatedDiscoveryInformation": {

            "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
            "traits": {
                "smithy.api#documentation": "<p>Automated discovery information.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
    "type": "structure",
    "members": {
        "ResourceArn":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of server resource.</p>"
            }
        },
```

```
            "ResourceOwnerId": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource consuming licenses.</p>"
               }
            },
            "AssociationTime": {
               "target": "com.amazonaws.licensemanager#DateTime",
               "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
               }
            },
            "AmiAssociationScope": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
         }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
         }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
         "type": "enum",
         "members":
{
            "AVAILABLE": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "AVAILABLE"
               }
            },
            "DISABLED": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "DISABLED"
               }
            }
```

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the resource.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
                }
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
                }
            },

    "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license
configuration.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurations": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConfiguration"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionContext": {

    "type": "structure",
        "members": {
          "UsageOperation": {
            "target": "com.amazonaws.licensemanager#UsageOperation",
            "traits": {
              "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from.  For more information about which platforms correspond to which usage
operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n        </p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {

       "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
            }
          },
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n        conversion task.</p>"
            }
```

```
        },
        "SourceLicenseContext": {
          "target": "com.amazonaws.licensemanager#LicenseConversionContext",
          "traits": {
            "smithy.api#documentation": "<p>Information about the license type this conversion task converted from.</p>"
          }
        },
        "DestinationLicenseContext": {
          "target": "com.amazonaws.licensemanager#LicenseConversionContext",
          "traits": {
            "smithy.api#documentation": "<p>Information about the license type this conversion task converted to.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
          "traits": {
            "smithy.api#documentation": "<p>The status of the conversion task.</p>"
          }
        },
        "StatusMessage": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
          }
        },
        "StartTime": {
          "target": "com.amazonaws.licensemanager#DateTime",
          "traits": {
            "smithy.api#documentation": "<p>The time the conversion task was started at.</p>"
          }
        },
        "LicenseConversionTime": {
          "target": "com.amazonaws.licensemanager#DateTime",
          "traits": {
            "smithy.api#documentation": "<p>The time the usage operation value of the resource was changed.</p>"
          }
        },
        "EndTime": {
          "target": "com.amazonaws.licensemanager#DateTime",
          "traits": {
            "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
          }
        }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskId": {
        "type": "string",
        "traits": {

       "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
            "IN_PROGRESS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "IN_PROGRESS"
                }
            },
            "SUCCEEDED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "SUCCEEDED"
                }
            },
            "FAILED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
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    "members": {
      "VCPU": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "vCPU"
        }
      },
      "INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Instance"
        }
      },
      "CORE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Core"
        }
      },
      "SOCKET": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Socket"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#LicenseDeletionStatus": {
    "type": "enum",
    "members": {
      "PENDING_DELETE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PENDING_DELETE"
        }
      },
      "DELETED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "DELETED"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#LicenseList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#License"
```

```
        }
      },
      "com.amazonaws.licensemanager#LicenseOperationFailure": {

        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Resource type.</p>"
            }
          },
          "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Error message.</p>"
            }
          },
          "FailureTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {

      "smithy.api#documentation": "<p>Failure time.</p>"
            }
          },
          "OperationName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the operation.</p>"
            }
          },
          "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
            }
          },
          "OperationRequestedBy": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
```

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            }
          },
          "MetadataList": {

            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Reserved.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseOperationFailureList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
        }
      },
      "com.amazonaws.licensemanager#LicenseSpecification": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

              "smithy.api#required": {}
            }
          },
          "AmiAssociationScope": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseSpecifications": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseSpecification"
```

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    }
},
"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {
            "target": "smithy.api#Unit",

        "traits": {
                "smithy.api#enumValue": "AVAILABLE"
            }
        },
        "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
        },
        "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
            }
        },
        "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

     "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
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            }
          }
        },
        "com.amazonaws.licensemanager#LicenseUsage": {
          "type": "structure",
          "members": {
            "EntitlementUsages": {
              "target": "com.amazonaws.licensemanager#EntitlementUsageList",
              "traits": {
                "smithy.api#documentation": "<p>License entitlement usages.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

          }
        },
        "com.amazonaws.licensemanager#LicenseUsageException": {
          "type": "structure",
          "members": {
            "Message": {
              "target": "com.amazonaws.licensemanager#Message"
            }
          },
          "traits": {
            "aws.protocols#awsQueryError": {
              "code": "LicenseUsageFailure",
              "httpResponseCode": 412
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
          }
        },
        "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
          },
          "output": {

       "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
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            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
          }
        },
        "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
          "type": "structure",
          "members": {
            "LicenseConfigurationArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results
 to return in a single call.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
```

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        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationAssociations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
                }
            },
            "NextToken": {

 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrants": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
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            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
          "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {

          "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n
  <li>\n            <p>\n              <code>GranteePrincipalARN</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>LicenseIssuerName</code>\n
        </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
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      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
      "type": "structure",
      "members": {
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",

    "traits": {
            "smithy.api#documentation": "<p>Distributed grant details.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
      },
      "errors": [
        {

  "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
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            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
          "LicenseOperationFailureList": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
            "traits": {
              "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
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            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the license configurations
for your account.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
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configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
```

```
      "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
       },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      },
```

```
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#BoxInteger",
              "traits": {

    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#Filters",
              "traits": {
                "smithy.api#documentation": "<p>\n         Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
          "type": "structure",
          "members": {
            "LicenseConversionTasks": {
              "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
              "traits": {
                "smithy.api#documentation": "<p>Information about the license configuration tasks for your
 account.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
          },
```

```
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target":
"com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n      <ul>\n        <li>\n          <p>\n            <code>LicenseConfigurationArn</code>\n
</p>\n        </li>\n      </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
```

```
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits":
{
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
          "type": "structure",
          "members": {
            "ReportGenerators": {
              "target": "com.amazonaws.licensemanager#ReportGeneratorList",
              "traits": {
                "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }

          }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {

      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {
```

```
        "LicenseSpecifications": {
          "target": "com.amazonaws.licensemanager#LicenseSpecifications",
          "traits": {
            "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenseVersions": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
      "type": "structure",
```

```
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
           "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
      "type": "structure",
      "members": {
        "Licenses": {
          "target": "com.amazonaws.licensemanager#LicenseList",
          "traits": {
            "smithy.api#documentation": "<p>License details.</p>"
          }
        },

"NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenses": {
      "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },

     "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                    <code>ProductSKU</code>\n                </p>\n            </li>\n
    <li>\n                <p>\n                    <code>Fingerprint</code>\n                </p>\n            </li>\n            <li>\n
<p>\n                    <code>Status</code>\n                </p>\n            </li>\n        </ul>"
```

```
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token
for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while specifying the\n recipient as this Amazon Web Services account, your organization, or an organizational unit\n (OU) to which this member account belongs.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n            <p>\n                <code>ParentArn</code>\n            </p>\n        </li>\n
<li>\n            <p>\n                <code>GranteePrincipalArn</code>\n            </p>\n        </li>\n    </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
            "Grants": {
                "target": "com.amazonaws.licensemanager#GrantList",
                "traits": {
                    "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>ProductSKU</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                    <code>LicenseIssuerName</code>\n                </p>\n
</li>\n            <li>\n                <p>\n                    <code>LicenseArn</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                    <code>GrantStatus</code>\n                </p>\n            </li>\n            <li>\n
<p>\n
        <code>GranterAccountId</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
```

```
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
      "type": "structure",
      "members": {
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",
           "traits": {
            "smithy.api#documentation": "<p>Received grant details.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedLicenses": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists received licenses.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
```

```
            },
            {

        "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                    <code>ProductSKU</code>\n
            </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#GrantedLicenseList",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
        "type": "structure",
        "members": {
          "LicenseArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
            }
          },

          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>Status</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>IssuerName</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Beneficiary</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
```

```
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
    "type": "structure",
    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#GrantedLicenseList",
        "traits": {
          "smithy.api#documentation": "<p>Received license details.</p>"
        }
      },

     "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FailedDependencyException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
```

```
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#InventoryFilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n are supported:</p>\n <ul>\n <li>\n <p>\n <code>account_id</code>
- The ID of the Amazon Web Services account that owns the resource.\n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
 </li>\n <li>\n <p>\n <code>application_name</code> - The name of the
application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n
 </li>\n <li>\n <p>\n <code>license_included</code> - The type of license included. \n
 Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values
are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-
server-web</code> | \n <code>windows-server-datacenter</code>.</p>\n </li>\n <li>\n
 <p>\n <code>platform</code> - The platform of the resource.\n Logical operators are
<code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n </li>\n <li>\n <p>\n
 <code>resource_id</code> - The ID of the resource. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n
 <code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical
operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> |
<code>NOT_EQUALS</code> (cross account).</p>\n </li>\n </ul>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
        "type": "structure",
        "members": {
          "ResourceInventoryList": {
            "target": "com.amazonaws.licensemanager#ResourceInventoryList",
            "traits": {
              "smithy.api#documentation": "<p>Information
about the resources.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
```

```
        "errors":
[
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
         }
      },
      "com.amazonaws.licensemanager#ListTokensRequest": {
         "type": "structure",
         "members": {
            "TokenIds": {
               "target": "com.amazonaws.licensemanager#StringList",
               "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanager#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
      <ul>\n          <li>\n          <p>\n          <code>LicenseArns</code>\n          </p>\n          </li>\n
</ul>"
               }
            },
            "NextToken": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanager#MaxSize100",
```

```
            "traits": {
                "smithy.api#documentation":
"<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
          "Tokens": {
            "target": "com.amazonaws.licensemanager#TokenList",
            "traits": {
              "smithy.api#documentation": "<p>Received token details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
             {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n consumption details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration.</p>"
         }
      },
      "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
         "type": "structure",
         "members": {
            "LicenseConfigurationArn": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                  "smithy.api#required": {}
               }
            },
             "MaxResults": {
               "target": "com.amazonaws.licensemanager#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
               }
            },
            "NextToken": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanager#Filters",
               "traits": {
                  "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n are supported:</p>\n <ul>\n <li>\n <p>\n <code>resourceArn</code> - The ARN of the license configuration resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n <code>resourceType</code> - The resource type
```

(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators
are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}

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        },
        "AssociationCount": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
      }
    },
    "com.amazonaws.licensemanager#ManagedResourceSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
      }
    },
    "com.amazonaws.licensemanager#MaxSize100": {

    "type": "integer",
      "traits": {
        "smithy.api#range": {
          "min": 1,
          "max": 100
        }
      }
    },
    "com.amazonaws.licensemanager#MaxSize3StringList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 3
        }
      }
    },
    "com.amazonaws.licensemanager#Message": {
      "type": "string"
    },
    "com.amazonaws.licensemanager#Metadata": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
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            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

    "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The value.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
    }
},
"com.amazonaws.licensemanager#MetadataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Metadata"
    }
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement maximum count is reached.</p>",
         "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#Options": {
    "type": "structure",
    "members": {
        "ActivationOverrideBehavior": {
            "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
            "traits": {
                "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter.</p>\n <ul>\n <li>\n <p>As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n
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</li>\n <li>\n <p>As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization.</p>\n </li>\n <li>\n <p>As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant.</p>\n </li>\n </ul>\n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n <p>Use this value to activate a grant without replacing any member accounts\n active grants for the same product.</p>\n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n <p>Use this value to activate a grant and disable other active grants in any\n member accounts
 for the same product. This action will also replace their\n previously activated grants with this activated grant.</p>\n </dd>\n </dl>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#OrganizationConfiguration": {
        "type": "structure",
        "members": {
            "EnableIntegration": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation":
 "<p>Enables Organizations integration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
    },
    "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 1
            }
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        }
      },
      "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductInformationFilterList": {
            "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
            "traits": {
              "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n          <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n          <p>The following filters and are supported when
the resource type \n          is <code>SSM_MANAGED</code>:</p>\n
          <ul>\n            <li>\n              <p>\n                <code>Application Name</code> - The name of the
application.\n                Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>Application Publisher</code> - The publisher of the application.\n                Logical
operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n              <p>\n
<code>Application Version</code> - The version of the application.\n                Logical operator is
<code>EQUALS</code>.</p>\n            </li>\n            <li>\n              <p>\n                <code>Platform
Name</code> - The name of the platform.\n                Logical operator is <code>EQUALS</code>.</p>\n
</li>\n            <li>\n              <p>\n                <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
          </li>\n            <li>\n              <p>\n                <code>Tag:key</code> - The key of a tag attached to an
Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>.  The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key.\n                </p>\n            </li>\n            <li>\n              <p>\n
<code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from
automated discovery.\n                Logical operator is <code>NOT_EQUALS</code>.</p>\n            </li>\n
<li>\n              <p>\n                <code>License Included</code> - The type of license included.\n                Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n                Possible values are:
 <code>sql-server-enterprise</code> | \n                <code>sql-server-standard</code> | \n                <code>sql-server-
web</code> |  \n                <code>windows-server-datacenter</code>.</p>\n            </li>\n          </ul>\n
<p>The following filters and logical operators are supported when the resource type\n          is
<code>RDS</code>:</p>\n          <ul>\n            <li>\n              <p>\n                <code>Engine Edition</code> -
The edition of the database engine.\n                Logical operator is <code>EQUALS</code>.\n                Possible
values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code>.</p>\n            </li>\n            <li>\n              <p>\n                <code>License Pack</code> - The license
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pack.\n            Logical operator is <code>EQUALS</code>.\n            Possible values are: <code>data
guard</code> | \n            <code>diagnostic pack sqlt</code> | \n
            <code>tuning pack sqlt</code> | \n            <code>ols</code> | \n            <code>olap</code>.</p>\n
    </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ProductInformationFilter": {
        "type": "structure",
        "members": {
            "ProductInformationFilterName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Filter name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductInformationFilterValue": {
                "target": "com.amazonaws.licensemanager#StringList",

          "traits": {
                    "smithy.api#documentation": "<p>Filter value.</p>"
                }
            },
            "ProductInformationFilterComparator": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Logical operator.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes product information filters.</p>"
        }
    },
    "com.amazonaws.licensemanager#ProductInformationFilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ProductInformationFilter"
        }
    },
    "com.amazonaws.licensemanager#ProductInformationList": {
```

```
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
      }
    },
    "com.amazonaws.licensemanager#ProvisionalConfiguration": {
      "type": "structure",
      "members": {
        "MaxTimeToLiveInMinutes": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
      }
    },
    "com.amazonaws.licensemanager#RateLimitExceededException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "RateLimitExceeded",
          "httpResponseCode": 429
        },
        "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 429
      }
    },
    "com.amazonaws.licensemanager#ReceivedMetadata": {
      "type": "structure",
      "members": {
        "ReceivedStatus": {
          "target": "com.amazonaws.licensemanager#ReceivedStatus",
          "traits": {
            "smithy.api#documentation": "<p>Received status.</p>"
          }
        },
        "ReceivedStatusReason": {
```

```
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
              "smithy.api#documentation": "<p>Received
status reason.</p>"
            }
          },
          "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed operations.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
        }
      },
      "com.amazonaws.licensemanager#ReceivedStatus": {
        "type": "enum",
        "members": {
          "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
          },
          "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue":
"PENDING_ACCEPT"
            }
          },
          "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "REJECTED"
            }
          },
          "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ACTIVE"
            }
          },
          "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
```

```
            "smithy.api#enumValue": "FAILED_WORKFLOW"
          }
        },
        "DELETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DELETED"
          }
        },
        "DISABLED": {
          "target": "smithy.api#Unit",
           "traits": {
            "smithy.api#enumValue": "DISABLED"
          }
        },
        "WORKFLOW_COMPLETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "WORKFLOW_COMPLETED"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#RedirectException": {
      "type": "structure",
      "members": {
        "Location": {
          "target": "com.amazonaws.licensemanager#Location",
          "traits": {
            "smithy.api#httpHeader": "Location"
          }
        },
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
         "smithy.api#error": "client",
        "smithy.api#httpError": 308
      }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
      },
      "output": {
```

```
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
```

```
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#RenewType":
{
      "type": "enum",
      "members": {
        "NONE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "None"
          }
        },
        "WEEKLY": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Weekly"
          }
        },
        "MONTHLY": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Monthly"
          }
        }
      }
    },
```

```
    "com.amazonaws.licensemanager#ReportContext": {
      "type": "structure",
      "members": {
        "licenseConfigurationArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {

      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this generator reports on.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
      }
    },
    "com.amazonaws.licensemanager#ReportFrequency": {
      "type": "structure",
      "members": {
        "value": {
          "target": "com.amazonaws.licensemanager#Integer",
          "traits": {
            "smithy.api#documentation": "<p>Number of times within the frequency period that a report is generated.  \n        The only supported value is <code>1</code>.</p>"
          }
        },
        "period": {
          "target": "com.amazonaws.licensemanager#ReportFrequencyType",

          "traits": {
            "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly, or monthly.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
      }
    },
    "com.amazonaws.licensemanager#ReportFrequencyType": {
      "type": "enum",
      "members": {
        "DAY": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DAY"
          }
```

```
            },
            "WEEK": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "WEEK"
               }
            },
            "MONTH": {
               "target": "smithy.api#Unit",
               "traits":
{
                  "smithy.api#enumValue": "MONTH"
               }
            }
         }
      },
      "com.amazonaws.licensemanager#ReportGenerator": {
         "type": "structure",
         "members": {
            "ReportGeneratorName": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Name of the report generator.</p>"
               }
            },
            "ReportType": {
               "target": "com.amazonaws.licensemanager#ReportTypeList",
               "traits": {
                  "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
               }
            },
            "ReportContext": {
               "target": "com.amazonaws.licensemanager#ReportContext",
               "traits": {
                  "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
               }
            },
            "ReportFrequency": {
               "target": "com.amazonaws.licensemanager#ReportFrequency",
               "traits": {
                  "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
               }
            },
            "LicenseManagerReportGeneratorArn": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
```

```
            }
        },
        "LastRunStatus": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
            }
        },
        "LastRunFailureReason":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
            }
        },
        "LastReportGenerationTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
            }
        },
        "ReportCreatorAccount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",

    "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
        },
        "S3Location": {
            "target": "com.amazonaws.licensemanager#S3Location",
            "traits": {
                "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
            }
        },
        "CreateTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Time the report was created.</p>"
            }
        },
```

```
        "Tags": {
          "target": "com.amazonaws.licensemanager#TagList",
          "traits": {
            "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
          }

}
    },
    "traits": {
      "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
    }
  },
  "com.amazonaws.licensemanager#ReportGeneratorList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ReportGenerator"
    }
  },
  "com.amazonaws.licensemanager#ReportGeneratorName": {
    "type": "string",
    "traits": {
      "smithy.api#length": {
        "min": 1,
        "max": 100
      }
    }
  },
  "com.amazonaws.licensemanager#ReportType": {
    "type": "enum",
    "members": {
      "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
        }

  },
        "LICENSE_CONFIGURATION_USAGE_REPORT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "LicenseConfigurationUsageReport"
          }
        }
    }
  },
  "com.amazonaws.licensemanager#ReportTypeList": {
    "type": "list",
    "member": {
```

```
            "target": "com.amazonaws.licensemanager#ReportType"
          }
        },
        "com.amazonaws.licensemanager#ResourceInventory": {
          "type": "structure",
          "members": {
            "ResourceId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>ID of the resource.</p>"
              }
            },
            "ResourceType": {
              "target": "com.amazonaws.licensemanager#ResourceType",
              "traits":
{
                "smithy.api#documentation": "<p>Type of resource.</p>"
              }
            },
            "ResourceArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
              }
            },
            "Platform": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Platform of the resource.</p>"
              }
            },
            "PlatformVersion": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
              }
            },
            "ResourceOwningAccountId":
{
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
          }
```

```
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ResourceInventory"
    }
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

         "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
```

```
                "smithy.api#enumValue": "EC2_INSTANCE"
              }
            },
            "EC2_HOST": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "EC2_HOST"
              }
            },
            "EC2_AMI": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "EC2_AMI"
              }
            },
            "RDS": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "RDS"
              }
            },
            "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
              "target": "smithy.api#Unit",
              "traits": {
                 "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#S3Location": {
          "type": "structure",
          "members": {
            "bucket": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
              }
            },
            "keyPrefix": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanager#ServerInternalException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "InternalError",
            "httpResponseCode": 500
          },
          "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
          "smithy.api#error": "server",
          "smithy.api#httpError": 500
        }
      },
      "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 4096
          }
        }
      },
      "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits":
{
          "smithy.api#length": {
            "min": 0,
            "max": 400
          },
          "smithy.api#pattern": "^[\\s\\S]+$"
        }
      },
      "com.amazonaws.licensemanager#String": {
        "type": "string"
      },
      "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#Tag": {
```

```
        "type": "structure",
        "members": {
          "Key": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Tag key.</p>"
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Tag value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Tag"
        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
          {
            "target":
"com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
```

```
            "TokenId": {
               "target": "com.amazonaws.licensemanager#String",
                "traits": {
                  "smithy.api#documentation": "<p>Token ID.</p>"
               }
            },
            "TokenType": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
               }
            },
            "LicenseArn": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
               }
            },
            "ExpirationTime": {
               "target": "com.amazonaws.licensemanager#ISO8601DateTime",
               "traits": {
                  "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
 format.</p>"
               }
            },
            "TokenProperties": {
               "target": "com.amazonaws.licensemanager#MaxSize3StringList",
               "traits": {
                  "smithy.api#documentation": "<p>Data specified by the caller.</p>"
               }
            },
            "RoleArns": {
               "target": "com.amazonaws.licensemanager#ArnList",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
               }
            },
            "Status": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
               }
            }
         },
         "traits": {
```

```
            "smithy.api#documentation": "<p>Describes a token.</p>"
        }
    },
    "com.amazonaws.licensemanager#TokenList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#TokenData"
        }
    },
    "com.amazonaws.licensemanager#TokenString": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 4096
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#TokenType": {
        "type": "enum",
        "members": {
            "REFRESH_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REFRESH_TOKEN"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                     "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanager#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
        },
        "output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
         }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseConfigurationStatus": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
            "traits": {
                "smithy.api#documentation": "<p>New status of the license configuration.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {

 "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
 configuration is licenseAffinityToHost.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New name
 of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New description of the license configuration.</p>"
            }
        },
        "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
```

```
            "traits": {
                "smithy.api#documentation": "<p>New product information.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        }
    },
    "traits":
{
        "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
    "type": "structure",
    "members": {},
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
       },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
```

```
            {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n          <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
          "type": "structure",
          "members": {
            "LicenseManagerReportGeneratorArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                "smithy.api#required": {}
              }
            },
            "ReportGeneratorName": {
              "target": "com.amazonaws.licensemanager#ReportGeneratorName",
              "traits": {
                "smithy.api#documentation": "<p>Name of the report generator.</p>",
                "smithy.api#required": {}
              }
            },
            "Type": {
              "target": "com.amazonaws.licensemanager#ReportTypeList",
              "traits": {
                "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n          <ul>\n            <li>\n              <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n              <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n          </ul>",
                "smithy.api#required": {}
              }
            },
            "ReportContext": {
              "target": "com.amazonaws.licensemanager#ReportContext",
              "traits": {
```

```
                "smithy.api#documentation": "<p>The report context.</p>",
                "smithy.api#required": {}
              }
            },
            "ReportFrequency": {
              "target": "com.amazonaws.licensemanager#ReportFrequency",
              "traits":
{
                "smithy.api#documentation": "<p>Frequency by which reports are generated.</p>",
                "smithy.api#required": {}
              }
            },
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientRequestToken",
              "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            },
            "Description": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
          },
          "errors": [
```

```
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
              "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
              "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n          <p>You can update the license specifications of AMIs, instances, and
hosts.\n          You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
          }
        },

        "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                "smithy.api#required": {}
              }
            },
            "AddLicenseSpecifications": {
              "target": "com.amazonaws.licensemanager#LicenseSpecifications",
              "traits": {
                "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
              }
            },
```

```
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation":
"<p>ARNs of the license configurations to remove.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
```

```
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
      "type": "structure",
      "members": {
        "S3BucketArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where
the License
 Manager information is stored.</p>"
          }
        },
        "SnsTopicArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used
for License Manager alerts.</p>"
          }
        },
        "OrganizationConfiguration": {
          "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account
discovery.</p>"
          }
        },
        "EnableCrossAccountsDiscovery": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"

      }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#UsageOperation": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
```

```
                "min": 0,
                "max": 50
            }
        }
      },
      "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

       "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      }
    }
}
CheckoutLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
```

ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.109 github.com/aws/aws-sdk-go-v2/internal/configsources 1.3.34

1.109.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
  - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
```

```
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
```

```
addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
```

```
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
      uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
```

disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody

```
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
```

```
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
```

```
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
= addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
```

```
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
```

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
```

```
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
```

```
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
```

```
//   - Fingerprint
//
//   - Status
Filters
[]types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListLicensesOutput struct {

// License details.
Licenses []types.License

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
```

```
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
```

DisassociateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger

OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint

```
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}
```

```
func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go
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```
AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
```

```
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
```

```
// [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string
```

```
 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
```

```
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
```

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },

    {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/DeregisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The type of name to filter by.</p>"
           }
        },
        "Values": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
          }
        },
        "Operator": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
          "traits": {
            "smithy.api#documentation": "<p>An operator for filtering results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
      "type":
 "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
      },
      "output": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
```

```
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
```

```
        "traits": {
            "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource specified \n\t\t\tin the request.</p>"
          }
        },
        "SecretArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
          }
        },
        "SubscriptionProviderStatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
          }
        },
        "LastSuccessfulDataRetrievalTime": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
      },
```

```
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/GetServiceSettings"

        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
      "type": "structure",
      "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
      "type": "structure",
      "members": {
        "LinuxSubscriptionsDiscovery": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
          "traits": {
            "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
          }
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
          "traits": {
            "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
```

```
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
          "AmiId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
        },
        "Region": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
        },
        "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
                "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
        },
        "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
        },
        "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
        },
        "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
            }
        },
```

```
            "SubscriptionProviderCreateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
               }
            },
            "SubscriptionProviderUpdateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
               }
            },
            "DualSubscription": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
               }
            },
            "RegisteredWithSubscriptionProvider": {
               "target": "smithy.api#String",
               "traits": {

     "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
```

```
        "traits": {
            "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager Linux Subscriptions",
```

```
        "arnNamespace": "license-manager-linux-subscriptions",
        "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
      },
      "aws.auth#sigv4": {
        "name": "license-manager-linux-subscriptions"
      },
      "aws.protocols#restJson1": {},
      "smithy.api#cors": {
        "additionalAllowedHeaders": [
          "*",
          "content-type",
          "x-amz-content-sha256",
          "x-amz-user-agent",
          "x-amzn-platform-id",
          "x-amzn-trace-id"
        ],
        "additionalExposedHeaders": [
          "x-amzn-errortype",
          "x-amzn-requestid",
          "x-amzn-trace-id"
        ]
      },
      "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
      "smithy.api#title": "AWS License Manager Linux Subscriptions",
      "smithy.rules#endpointRuleSet": {
        "version": "1.0",
        "parameters": {
          "Region": {
            "builtIn": "AWS::Region",
            "required": false,
            "documentation": "The AWS region used to dispatch the request.",
            "type": "String"
          },
          "UseDualStack": {
            "builtIn": "AWS::UseDualStack",
            "required": true,
            "default": false,
            "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
            "type": "Boolean"
          },
          "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
 configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
```

```
        "type": "Boolean"
      },
      "Endpoint": {
        "builtIn": "SDK::Endpoint",
        "required": false,
        "documentation": "Override the endpoint used to send this request",
        "type": "String"
      }
    },
    "rules": [
      {
        "conditions": [
          {
            "fn": "isSet",
            "argv": [
              {
                "ref": "Endpoint"
              }
            ]
          }
        ],
        "rules": [
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }

],
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseDualStack"
```

```
                        },
                        true
                    ]

}
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                    },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"

    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

    "fn": "aws.partition",
                            "argv": [
```

```
                {
                  "ref": "Region"
                }
              ],
              "assign": "PartitionResult"
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {

                  "ref": "UseFIPS"
                    },
                    true
                  ]
                },
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }

],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {
                              "ref": "PartitionResult"

},
                                "supportsFIPS"
                            ]
                          }
```

```
                ]
              },
              {
                "fn": "booleanEquals",
                "argv": [
                  true,
                  {
                    "fn": "getAttr",
                    "argv": [

                     {
                          "ref": "PartitionResult"
                      },
                      "supportsDualStack"
                    ]
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [],

      "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                      "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
                  }
                ],

            "type": "tree"
                  }
                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",

                "type": "error"
              }
            ],
```

```
                "type": "tree"
            },
            {

        "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseFIPS"
                        },
                        true
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

                "fn": "booleanEquals",
                            "argv": [
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
                                true

                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                        "headers": {}
```

```
                    },
                    "type": "endpoint"
                  }
                ],
                "type": "tree"
              }
            ],
            "type": "tree"
          },
          {
            "conditions": [],
            "error": "FIPS is enabled
but this partition does not support FIPS",
            "type": "error"
          }
        ],
        "type": "tree"
      },
      {
        "conditions": [
          {
            "fn": "booleanEquals",
            "argv": [
              {
                "ref": "UseDualStack"
              },
              true

    ]
          }
        ],
        "rules": [
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  true,
                  {
                    "fn": "getAttr",
                    "argv": [
                      {

                      "ref": "PartitionResult"
                      },
                      "supportsDualStack"
                    ]
                  }
```

```
                ]
              }
            ],
            "rules": [
              {
                "conditions": [],
                "rules": [

        {
                        "conditions": [],
                        "endpoint": {
                          "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                          "properties": {},
                          "headers": {}
                        },
                        "type": "endpoint"
                      }
                    ],
                    "type": "tree"

                }
                    ],
                    "type": "tree"
                  },
                  {
                    "conditions": [],
                    "error": "DualStack is enabled but this partition does not support DualStack",
                    "type": "error"
                  }
                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                      "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
                  }
                ],
                "type": "tree"
```

```
                    }
                  ],
                  "type": "tree"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [],
              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
          ],
          "type": "tree"
        }
      ]
    },
    "smithy.rules#endpointTests": {
      "testCases": [
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

      }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
```

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            "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
                  }
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true
                }
              },
              {
                "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
                  }

        },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                  }
                },
                "params": {
                  "Region": "cn-north-1",
                  "UseFIPS": true,
                  "UseDualStack": true
                }
              },
              {

          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                  }
                },
```

```
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
```

```
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }

      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {

    "Region": "us-iso-east-1",
        "UseFIPS": true,
```

```
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS":
false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
```

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      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": true
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
       }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {

   "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
      "endpoint": {
        "url": "https://example.com"
```

```
                }

        },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://example.com"
                  }
                },
                "params": {
                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {

                "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                "expect": {
                  "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {

  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
```

```
                }
              },
              {
                "documentation": "Missing region",
                "expect": {
                  "error": "Invalid Configuration: Missing Region"
                }
              }
            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled LinuxSubscriptionsDiscovery"

      },
            {
              "name": "Disabled",
              "value": "Disabled",
              "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
        "type": "structure",
        "members": {
          "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
              "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
              "smithy.api#required": {}
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },

 {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptionInstances"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "Instances"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
```

```
            "Filters": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>.</p>\n        <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto streamline results:</p>\n        <ul>\n          <li>\n  <p>\n              <code>AccountID</code>\n            </p>\n          </li>\n          <li>\n            <p>\n    <code>AmiID</code>\n            </p>\n          </li>\n          <li>\n            <p>\n <code>DualSubscription</code>\n            </p>\n          </li>\n          <li>\n            <p>\n <code>InstanceID</code>\n            </p>\n          </li>\n          <li>\n            <p>\n <code>InstanceType</code>\n            </p>\n          </li>\n          <li>\n            <p>\n <code>ProductCode</code>\n            </p>\n          </li>\n          <li>\n            <p>\n <code>Region</code>\n            </p>\n          </li>\n          <li>\n            <p>\n <code>Status</code>\n            </p>\n          </li>\n          <li>\n            <p>\n <code>UsageOperation</code>\n            </p>\n          </li>\n        </ul>\n        <p>For each filter, you can use one of the following <code>Operator</code>\n values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n          <li>\n            <p>\n <code>contains</code>\n            </p>\n          </li>\n          <li>\n            <p>\n <code>equals</code>\n            </p>\n          </li>\n          <li>\n            <p>\n <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to\n start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                "smithy.api#length": {
                  "min": 1,
                  "max": 16384
                }
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
```

```
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {

       "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
           {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptions"
          },
          "smithy.api#idempotent": {},
```

```
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",

   "items": "Subscriptions"
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
         "type": "structure",
         "members": {
            "Filters": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n         <p>The valid names for this filter are:</p>\n         <ul>\n
<li>\n            <p>\n               <code>Subscription</code>\n            </p>\n         </li>\n         </ul>\n
<p>The
 valid Operators for this filter are:</p>\n         <ul>\n            <li>\n               <p>\n
<code>contains</code>\n            </p>\n         </li>\n         <li>\n            <p>\n
<code>equals</code>\n            </p>\n         </li>\n         <li>\n            <p>\n
<code>Notequal</code>\n            </p>\n         </li>\n      </ul>"
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                     "min": 1,
                     "max": 16384
                  }
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
          "Subscriptions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
```

```
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }

    },
     "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSources": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
            "traits": {
              "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }

  },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
     },
     "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
```

```
        "members": {
          "RegisteredSubscriptionProviders": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request.</p>"
            }
          },

          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {

          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{resourceArn}"
```

```
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
```

```
            },
            {
              "name": "CONTAINS",
              "value": "Contains",
              "documentation": "Contains operator"
            }
          ],
          "smithy.api#length": {
            "min": 1,
            "max": 20
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled OrganizationIntegration"
            },
            {
              "name": "Disabled",
              "value": "Disabled",
              "documentation": "Disabled OrganizationIntegration"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/subscription/RegisterSubscriptionProvider"

            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
         "type": "structure",
         "members": {
            "SubscriptionProviderSource": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
               "traits": {
                  "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                  "smithy.api#required": {}
               }
            },
            "SecretArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                  "smithy.api#required": {}
               }
            },
            "Tags": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
               "traits": {
                  "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
               }
            }
         },
         "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation":
"<p>The Linux subscription provider that you registered.</p>"
                }
            },
            "SubscriptionProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
```

```
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
             "traits": {
               "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
               "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits":
{
               "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
               "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
```

```
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

    }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "InProgress",
              "value": "InProgress",
              "documentation": "InProgress status"
            },
            {
              "name": "Completed",
              "value": "Completed",
              "documentation": "Completed status"
            },
            {
              "name": "Successful",
              "value": "Successful",
              "documentation": "Successful status"
            },
            {
              "name": "Failed",
              "value": "Failed",
              "documentation": "Failed status"
            }
          ]
        }
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#length": {
                    "min": 1,
                    "max": 100
                }
            }
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            },
            "smithy.api#uniqueItems": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
{
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [

 {
              "name": "RedHat",
              "value": "RedHat",
              "documentation": "RedHat subscription provider namespace"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
```

```
            "name": "ACTIVE",
            "value": "ACTIVE",
            "documentation": "ACTIVE status"
          },
          {
            "name": "INVALID",
            "value": "INVALID",

"documentation": "INVALID status"
          },
          {
            "name": "PENDING",
            "value": "PENDING",
            "documentation": "PENDING status"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
              "method": "PUT",
              "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
          "type": "structure",
          "members":
 {
            "resourceArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            },
            "tags": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }

        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
          "type": "map",
```

```
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation":
"<p>The request was denied due to request throttling.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
           "smithy.api#http": {
            "method": "DELETE",
```

```
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tagKeys": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
            "traits": {

           "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
              "smithy.api#httpQuery": "tagKeys",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"
```

```
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                    "smithy.api#required": {}
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowUpdate": {
                "target":
 "smithy.api#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
```

```
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
              "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
          },
          "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
             "traits": {
              "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
              "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
            }

       },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
```

```
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
```

```
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string
```

```
// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
```

```
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
```

```
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
```

spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID

ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
```

```
        "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 2
                    }
                }
            },
            "DomainCredentialsProvider": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
                }
            },
            "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
```

```
{
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "SELF_MANAGED",
              "value": "SELF_MANAGED",
              "documentation": "SELF_MANAGED type of Active Directory"
            },
            {
              "name": "AWS_MANAGED",
              "value": "AWS_MANAGED",
              "documentation": "AWS_MANAGED type of Active Directory"
            }
          ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
```

```
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n        <note>\n        <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http":
 {
              "code": 200,
              "method": "POST",
              "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                "smithy.api#required": {}
              }
```

```
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
               }
            },
            "Tags": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
               "traits": {
                  "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
               }
            }
         },
         "traits": {

      "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
         "type": "structure",
         "members": {
            "InstanceUserSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
         "type": "integer"
      },
      "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
             }
         },
         "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
```

```
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

          {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS)
license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
             },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
```

```
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for
the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
            }
```

```
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
          "type": "union",
          "members": {
            "SecretsManagerCredentialsProvider":
{
              "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
              "traits": {
                "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
           },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/DeregisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
```

```
    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/user/DisassociateUser"
        },
        "smithy.api#idempotent": {}
```

```
    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
          }
        },
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
          }
        },
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
          }
        },
        "InstanceUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
          }
        },
        "Domain": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
      "type": "structure",
```

```
        "members": {
          "InstanceUserSummary":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
              "smithy.api#length": {
                "min": 1
              },

    "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Attribute": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
            }
          },
          "Operation": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
            }
```

```
            },
            "Value": {
               "target": "smithy.api#String",
               "traits":
{
                  "smithy.api#documentation": "<p>Value of the filter.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
         "type": "union",
         "members": {
            "ActiveDirectoryIdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
         "type": "structure",
         "members": {
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
```

```
        "Settings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
            "smithy.api#required": {}
          }
        },
        "Product": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "IdentityProviderArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
          }
        },
        "FailureMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an identity provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
      "type": "list",
      "member": {

        "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
      }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
      "type": "structure",
      "members": {
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
            "smithy.api#required": {}
          }
        },
        "Products": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
           "traits": {
            "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
            "smithy.api#required": {}
          }
        },
        "LastStatusCheckDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The date of the last status check.</p>"
          }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
      }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },

    "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
            "smithy.api#required": {}
          }
        },
        "InstanceUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
           }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
          }
        },
```

```
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
               }
            },
            "AssociationDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
               }
            },
            "DisassociationDate": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
             "smithy.api#error": "server",
            "smithy.api#httpError": 500
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
```

```
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
```

```
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

       "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
```

```
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
{
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
```

```
                }
              ]
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [
                {

                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }
              ],
              "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
              "type": "error"
            },
            {
              "conditions": [],
              "endpoint": {
                "url": {
                  "ref": "Endpoint"
                },

"properties": {},
                "headers": {}
              },
              "type": "endpoint"
            }
```

```
      ],
      "type": "tree"
    },
    {
      "conditions": [
        {
          "fn": "isSet",
          "argv": [
            {
              "ref": "Region"
            }
          ]
        }
      ],
      "rules": [
        {
          "conditions": [
            {
              "fn": "aws.partition",

              "argv": [
                {
                  "ref": "Region"
                }
              ],
              "assign": "PartitionResult"
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },

true

                  ]
                },
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
```

```
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
"fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  },
                {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }
            ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                      "properties": {},
                      "headers": {}
```

```
                    },
                    "type": "endpoint"
                }

    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [

  {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "fn": "getAttr",
                                "argv": [

{
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            },
                            true
                        ]
                    }
```

```
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {

      "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                      "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
                  }
                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "FIPS is enabled but this partition does not support FIPS",
                "type": "error"

}
            ],
            "type": "tree"
          },
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {

  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {
```

```
                                        "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]

        }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }

                    ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

            "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    }
],
"type": "tree"
```

```
            },
            {
              "conditions": [],
              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
          ]
        },
        "smithy.rules#endpointTests": {
          "testCases": [
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
              "expect":
{
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",

      "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
```

```
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS":
true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
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        "endpoint":
{
            "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
          }
        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
          }
        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": false,
           "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint":
{
            "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
```

```
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
```

```
            "params": {
              "Region": "us-iso-east-1",
              "UseFIPS": true,
              "UseDualStack": false

    }
          },
          {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "error": "DualStack is enabled but this partition does not support DualStack"
            },
            "params": {
              "Region": "us-iso-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
              }

        },
            "params": {
              "Region": "us-iso-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
              "Region": "us-isob-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack
disabled",
            "expect": {
              "endpoint": {
```

```
                    "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
                  }
                },
                "params": {
                  "Region": "us-isob-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                  "error": "DualStack is enabled but this partition does not support DualStack"
                },
                "params": {
                  "Region": "us-isob-east-1",

"UseFIPS": false,
                  "UseDualStack": true
                }
              },
              {
                "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
                  }
                },
                "params": {
                  "Region": "us-isob-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
                "expect": {

                 "endpoint": {
                    "url": "https://example.com"
                  }
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
```

```
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack":
false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "Missing region",
      "expect": {
        "error": "Invalid Configuration: Missing Region"
      }
    }
  ],
```

```
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
        "type": "structure",
        "members": {
          "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
               "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
          },
          "HealthStatus": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
            "traits": {
              "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
          },
          "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information
 about a Remote Desktop Services (RDS) license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
            }
          },
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of license server.</p>"
```

```
            }
          },
          "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

   "traits": {
                "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is one.</p>"
            }
          },
          "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits":
 {
              "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server.</p>"
            }
          },
          "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint</p>"
            }
          },
          "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
          },
```

```
          "CreationTime": {
            "target": "smithy.api#Timestamp",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp when License Manager created the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

  "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "PROVISIONING",
              "value": "PROVISIONING",
              "documentation": ""
            },
            {
              "name": "PROVISIONING_FAILED",
              "value": "PROVISIONING_FAILED",
              "documentation": ""
            },
            {
              "name": "PROVISIONED",
              "value": "PROVISIONED",
              "documentation": ""
            },
            {
              "name": "DELETING",
              "value": "DELETING",
              "documentation": ""
            },
            {
```

```
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""

          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
    }
},
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
    "type": "structure",
    "members": {
        "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>",
```

```
                "smithy.api#required": {}
              }
            },
            "ServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {

            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use
 the following filters to streamline results:</p>\n        <ul>\n            <li>\n                <p>Product</p>\n            </li>\n
        <li>\n                <p>DirectoryId</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
```

```
        "type": "structure",
        "members": {
          "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

          "traits": {
              "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
              "smithy.api#required": {}
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
         "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
```

```
    {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members":
{
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n
        <li>\n            <p>InstanceId</p>\n          </li>\n        </ul>"
            }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next
 token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
```

```
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/license-server/ListLicenseServerEndpoints"
            },

         "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "LicenseServerEndpoints"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
         "type": "structure",
         "members": {
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                  "smithy.api#range": {
                     "min": 1,
                     "max": 100
                  }
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n               <p>IdentityProviderArn</p>\n            </li>\n         </ul>"
               }
            },
```

```
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
         "type": "structure",
         "members": {
            "LicenseServerEndpoints": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
                "traits": {
                  "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
         "type":
 "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
{
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
```

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            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>Username</p>\n
</li>\n          <li>\n          <p>Domain</p>\n          </li>\n          </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating.
 This is the nextToken \n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
         "type": "structure",
         "members": {
            "ProductUserSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
```

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empty, \n\tthere are additional elements that the service
 hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
```

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    }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
      "Tags": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
```

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which
 provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
```

```
      "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n        <ul>\n
   <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n          </li>\n
<li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummaries": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username":
{
            "target": "smithy.api#String",
            "traits": {
```

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                "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
                "smithy.api#required": {}
            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
            }
        },
         "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {

        "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
            }
        },
        "SubscriptionStartDate": {
            "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
          },
          "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
          "RdsSalCredentialsProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider":
 {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
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        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {

    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
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            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits":
 {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation":
 "<p>Metadata that describes the results of an identity provider operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
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\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",

     "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
              "smithy.api#length": {
                "min": 1
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
          "smithy.api#length": {

       "min": 5,
            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
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```
        "members": {
          "Endpoint": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
             "traits": {
              "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {

  "target": "smithy.api#String"
            }
        },
```

```
      "traits": {
        "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {
      "type": "structure",
      "members": {
        "Subnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
            "smithy.api#length": {
              "min": 1
            },
            "smithy.api#required": {}
          }
        },
        "SecurityGroupId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

         "traits": {
            "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

        },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n        <note>\n          <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/StartProductSubscription"
          }

    }
     },
     "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
       "type": "structure",
       "members": {
         "Username": {
           "target": "smithy.api#String",
           "traits": {
             "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
             "smithy.api#required": {}
           }
         },
         "IdentityProvider": {
           "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
           "traits": {
             "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
```

```
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {

 "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n         <p>Valid values:
<code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n
</p>",
                "smithy.api#required": {}
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
              }

 }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

    },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

    },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/user/StopProductSubscription"
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
      "type": "structure",
      "members": {
        "Username": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"

            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
```

```
                "smithy.api#required": {}
            }

    }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {

"min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
"<p>Adds tags to a resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation":
"<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
```

```
            "type": "structure",
            "members": {},
            "traits": {
                "smithy.api#output": {}
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Tags": {
            "type": "map",
            "key": {
                "target": "smithy.api#String"
            },
            "value": {
                "target": "smithy.api#String"
            },
            "traits": {
                "smithy.api#length": {
                    "min": 0,
                    "max": 50
                },
                "smithy.api#sensitive": {}
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
    {
            "type": "structure",
            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
    request.</p>",
                "smithy.api#error": "client"
            }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
            "type": "operation",
            "input": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
            },
            "output": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
            },
            "errors": [
                {
                    "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
                },
```

```
            {

             "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
              "method": "DELETE",
              "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}

          }
            },
            "TagKeys": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
              "traits": {
                "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                "smithy.api#httpQuery": "tagKeys",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
```

```
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
          "smithy.api#http": {

      "code": 200,
            "method": "POST",
            "uri": "/identity-provider/UpdateIdentityProviderSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
```

```
            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
               }
            },
            "UpdateSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
               "traits": {
                  "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n               <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
      <li>\n               <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n               <p>Security
 group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n         </ul>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
         "type": "structure",
         "members": {
            "IdentityProviderSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
               "traits": {
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
         "type": "structure",
         "members": {
            "AddSubnets": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
```

```
                "smithy.api#required": {}
              }
            },
            "RemoveSubnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                "smithy.api#required": {}
              }
            },
            "SecurityGroupId": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
              "traits": {
                "smithy.api#documentation": "<p>A security group ID that
 allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for
activation servers.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
          }
        }
      }
    }
```


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ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming

```
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
{
  "smithy": "2.0",
  "metadata": {
     "suppressions": [
        {
           "id": "HttpMethodSemantics",
           "namespace": "*"
        },
        {
           "id": "HttpResponseCodeSemantics",
           "namespace": "*"
        },
        {
           "id": "PaginatedTrait",
           "namespace": "*"
        },
        {
           "id": "HttpHeaderTrait",
           "namespace": "*"
        },
        {
           "id": "HttpUriConflict",
           "namespace": "*"
        },
        {
           "id": "Service",
```

```
            "namespace": "*"
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
             },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateToken"
            },
            {
                "target": "com.amazonaws.licensemanager#DeleteGrant"
```

```
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseUsage"
    },
    {
      "target": "com.amazonaws.licensemanager#GetServiceSettings"
    },
    {
      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
     },
    {
      "target": "com.amazonaws.licensemanager#ListDistributedGrants"
    },
    {
```

```
    "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenses"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
  },
  {

   "target": "com.amazonaws.licensemanager#ListLicenseVersions"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedGrants"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
  },
  {
    "target": "com.amazonaws.licensemanager#ListResourceInventory"
  },
  {
    "target": "com.amazonaws.licensemanager#ListTagsForResource"
  },
  {
    "target": "com.amazonaws.licensemanager#ListTokens"
  },
  {
    "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
   },
  {
    "target": "com.amazonaws.licensemanager#RejectGrant"
  },
```

```
            {
                "target": "com.amazonaws.licensemanager#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanager#UntagResource"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                 "sdkId": "License Manager",
                "arnNamespace": "license-manager",
                "cloudFormationName": "LicenseManager",
                "cloudTrailEventSource": "licensemanager.amazonaws.com",
                "endpointPrefix": "license-manager"
            },
            "aws.auth#sigv4": {
                "name": "license-manager"
            },
            "aws.protocols#awsJson1_1": {},
            "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software
vendors across multiple \n         Amazon Web Services accounts and on-premises servers.</p>",
            "smithy.api#title": "AWS License Manager",
            "smithy.api#xmlNamespace": {
                "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
            },
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
                    "Region": {
                        "builtIn": "AWS::Region",
                        "required": false,
                        "documentation": "The AWS region used to dispatch the request.",
                        "type": "String"
                    },
                    "UseDualStack": {
                        "builtIn": "AWS::UseDualStack",
```

```
            "required": true,
            "default": false,
            "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
            "type": "Boolean"
          },
          "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]

              }
            ],
            "type": "tree",
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
```

```
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
            {

"conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": {
                        "ref": "Endpoint"
                     },
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ]
    },
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Region"
                    }
                ]
            }
        ],
        "type": "tree",
        "rules": [
            {
                "conditions": [
```

```
                {
                  "fn": "aws.partition",
                  "argv": [
                    {
                      "ref": "Region"
                    }
                  ],
                  "assign": "PartitionResult"
                }
              ],
              "type": "tree",
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref":
"UseFIPS"
                        },
                        true
                      ]
                    },
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseDualStack"
                        },
                        true
                      ]
                    }
                  ],
                  "type": "tree",
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
                              "argv": [
                                {
                                  "ref": "PartitionResult"
                                },
```

```
                                    "supportsFIPS"
                                ]

                            }
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {
                                        "ref": "PartitionResult"
                                    },

    "supportsDualStack"
                                ]
                            }
                        ]
                    }
                ],
                "type": "tree",
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}

                    },
                        "type": "endpoint"
                    }
                ]
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ]
    },
    {
        "conditions": [
```

```
        {
          "fn": "booleanEquals",

      "argv": [
                {
                  "ref": "UseFIPS"
                },
                true
              ]
            }
          ],
          "type": "tree",
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    true,

{
                      "fn": "getAttr",
                      "argv": [
                        {
                          "ref": "PartitionResult"
                        },
                        "supportsFIPS"
                      ]
                    }
                  ]
                }
              ],
              "type": "tree",
              "rules": [

{
                  "conditions": [],
                  "endpoint": {
                    "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
                    "properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }
              ]
            },
            {
              "conditions": [],
```

```
                "error": "FIPS is enabled but this
partition does not support FIPS",
                "type": "error"
              }
            ]
          },
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "type": "tree",
             "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },

    "supportsDualStack"
                          ]
                        }
                      ]
                    }
                  ],
                  "type": "tree",
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {
                        "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
```

```
                    },
                        "type": "endpoint"
                    }
                  ]
                },
                {
                  "conditions": [],
                  "error": "DualStack is enabled but this partition does not support DualStack",
                  "type": "error"
                }
              ]
            },
            {
              "conditions": [],
              "endpoint": {
                "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                 "properties": {},
                "headers": {}
              },
              "type": "endpoint"
            }
          ]
        }
      ]
    },
    {
      "conditions": [],
      "error": "Invalid Configuration: Missing Region",
      "type": "error"
    }
  ]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager.af-south-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "af-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
```

```
},
{
  "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-east-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-east-1",
    "UseFIPS": false,
    "UseDualStack": false
   }
},
{
  "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-1.amazonaws.com"
    }
  },
  "params": {
    "Region": "ap-northeast-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-2.amazonaws.com"
     }
  },
  "params": {
    "Region": "ap-northeast-2",
    "UseFIPS": false,
    "UseDualStack": false
  }
},
{
  "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager.ap-northeast-3.amazonaws.com"
    }
  },
  "params": {
```

```
            "Region": "ap-northeast-3",
            "UseFIPS": false,
            "UseDualStack": false
          }

    },
        {
          "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-south-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-1.amazonaws.com"

    }
          },
          "params": {
            "Region": "ap-southeast-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-southeast-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
```

```
        "documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.ap-southeast-3.amazonaws.com"
              }
            },
            "params": {
              "Region": "ap-southeast-3",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.ca-central-1.amazonaws.com"
              }
            },

           "params": {
              "Region": "ca-central-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.eu-central-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "eu-central-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.eu-north-1.amazonaws.com"
              }
            },
            "params": {
```

```
            "Region": "eu-north-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-south-1.amazonaws.com"
            }
          },
          "params": {
            "Region":
"eu-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-west-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
          "expect": {

          "endpoint": {
              "url": "https://license-manager.eu-west-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
```

```
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-west-3.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-west-3",
        "UseFIPS": false,

"UseDualStack": false
      }
    },
    {
      "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.me-south-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "me-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.sa-east-1.amazonaws.com"
         }
      },
      "params": {
        "Region": "sa-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
```

```
            "UseDualStack": false
          }

    },
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-fips.us-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.us-east-2.amazonaws.com"
              }

           },
            "params": {
              "Region": "us-east-2",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-fips.us-east-2.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-2",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region
    us-west-1 with FIPS disabled and DualStack disabled",
            "expect": {
```

```
            "endpoint": {
              "url": "https://license-manager.us-west-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-west-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-west-1.amazonaws.com"
            }
          },
          "params": {

      "Region": "us-west-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-west-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-west-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

"expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-west-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-west-2",
            "UseFIPS": true,
```

```
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,

            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
```

```
                "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-northwest-1",
              "UseFIPS": false,
              "UseDualStack": false

    }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
             }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
```

```
        },

    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
        }
       },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-west-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-west-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
        }
```

```
      },
      "params": {
        "Region": "us-gov-west-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-gov-east-1.api.aws"
        }
      },

  "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
```

```
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
               "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled
but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
               "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
```

```
    },

    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },

  "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
```

```
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,

      "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips enabled and dualstack disabled",
          "expect": {
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips disabled and dualstack enabled",
          "expect": {
            "error":
 "Invalid Configuration: Dualstack and custom endpoint are not supported"
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "Missing region",
          "expect": {
```

```
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
  },
  "com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
    "output": {
      "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"

  }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
    }
  },
  "com.amazonaws.licensemanager#AcceptGrantRequest": {
    "type": "structure",
    "members": {
```

```
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant
ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#AccessDeniedException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
```

```
"code": "ServiceAccessDenied",
            "httpResponseCode": 401
          },
          "smithy.api#documentation": "<p>Access to resource denied.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 401
        }
    },
    "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
      "type": "enum",
      "members": {
        "DISTRIBUTED_GRANTS_ONLY": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
          }
        },
        "ALL_GRANTS_PERMITTED_BY_ISSUER": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#AllowedOperation": {

    "type": "enum",
      "members": {
        "CREATE_GRANT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "CreateGrant"
          }
        },
        "CHECKOUT_LICENSE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "CheckoutLicense"
          }
        },
        "CHECKOUT_BORROW_LICENSE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "CheckoutBorrowLicense"
          }
        },
```

```
            "CHECK_IN_LICENSE": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "CheckInLicense"
               }
            },
            "EXTEND_CONSUMPTION_LICENSE":
{
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "ExtendConsumptionLicense"
               }
            },
            "LIST_PURCHASED_LICENSES": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "ListPurchasedLicenses"
               }
            },
            "CREATE_TOKEN": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "CreateToken"
               }
            }
         }
      },
      "com.amazonaws.licensemanager#AllowedOperationList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#AllowedOperation"
         },
         "traits": {
            "smithy.api#length": {
               "min": 1,
               "max":
7
            }
         }
      },
      "com.amazonaws.licensemanager#Arn": {
         "type": "string",
         "traits": {
            "smithy.api#length": {
               "min": 0,
               "max": 2048
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
```

```
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
      },
      "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Arn"
        }
      },
      "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError":
{
            "code": "AuthorizationFailure",
            "httpResponseCode": 403
          },
          "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n        policy associated with this account.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 403
        }
      },
      "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
          "LastRunTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
      },

    "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
          "smithy.api#default": false
        }
```

```
    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
      "type": "structure",
      "members": {
        "AllowEarlyCheckIn": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxTimeToLiveInMinutes": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
            "smithy.api#required": {}
          }
        }

},
      "traits": {
        "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
      }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
      "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
        },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
```

```
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
          },
          {
            "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
          },
          {
```

```
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
      },
      "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
{
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
              "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
              "smithy.api#required": {}
            }
          },
          "DigitalSignatureMethod": {
            "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
            "traits": {
              "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
              "smithy.api#required": {}
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
          },
          "CheckoutMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Information about constraints.</p>"
            }
          },
          "ClientToken": {
```

```
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License consumption token.</p>"
            }
          },
          "EntitlementsAllowed":
{
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
          },
          "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
              "smithy.api#documentation": "<p>Signed token.</p>"
            }
          },
          "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
            }
          },
          "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
            }
          },
          "CheckoutMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Information about constraints.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
               "target":
"com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n         <note>\n         <p>If the
account that created the license is the same that is performing the check out, you must\n         specify the account
as the beneficiary.</p>\n         </note>"
         }
      },
      "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
         "type": "structure",
         "members": {
            "ProductSKU": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Product
SKU.</p>",
                  "smithy.api#required": {}
               }
            },
            "CheckoutType": {
               "target": "com.amazonaws.licensemanager#CheckoutType",
               "traits": {
                  "smithy.api#documentation": "<p>Checkout type.</p>",
                  "smithy.api#required": {}
               }
            },
            "KeyFingerprint": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                  "smithy.api#required": {}
               }
            },
            "Entitlements": {
               "target": "com.amazonaws.licensemanager#EntitlementDataList",
```

```
            "traits": {
              "smithy.api#documentation": "<p>License entitlements.</p>",

    "smithy.api#required": {}
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          },
          "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License beneficiary.</p>"
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
          }
        },
        "traits": {

       "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutLicenseResponse": {
        "type": "structure",
        "members": {
          "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
              "smithy.api#documentation": "<p>Checkout type.</p>"
            }
          },
          "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License consumption token.</p>"
            }
          },
          "EntitlementsAllowed": {
```

```
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
          },
          "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
              "smithy.api#documentation": "<p>Signed token.</p>"
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
          },
          "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
          },
          "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
            }
          },
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutType": {
        "type": "enum",
        "members": {
          "PROVISIONAL": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PROVISIONAL"
```

```
            }
          },
          "PERPETUAL": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PERPETUAL"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ClientRequestToken": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 36
          }
        }
      },
      "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 2048
          },
          "smithy.api#pattern": "^\\S+$"
        }
      },
      "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "ConflictException",
            "httpResponseCode":
409
          },
          "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 409
        }
      },
```

```
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
      "type": "structure",
      "members": {
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
          }
        },
        "ConsumedLicenses": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
          }
        }
      },

"traits": {
        "smithy.api#documentation": "<p>Details about license consumption.</p>"
      }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
      }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
      "type": "structure",
      "members": {
        "RenewType": {
          "target": "com.amazonaws.licensemanager#RenewType",
          "traits": {
            "smithy.api#documentation": "<p>Renewal frequency.</p>"
          }
        },
        "ProvisionalConfiguration": {
          "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
           }
        },
        "BorrowConfiguration": {
          "target": "com.amazonaws.licensemanager#BorrowConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
          }
        }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
 license\n            entitlements with a specific Amazon Web Services account, an organization, or an\n
 organizational unit (OU). For more
  information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
 licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
```

```
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientToken",
              "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            },
            "GrantName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Grant name.</p>",
                "smithy.api#required": {}

    }
            },
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
              }
            },
            "Principals": {
              "target": "com.amazonaws.licensemanager#PrincipalArnList",
              "traits": {
                "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an
Amazon Resource Name\n        (ARN):</p>\n        <ul>\n        <li>\n        <p>An Amazon Web Services
account, which includes only the account specified.</p>\n        </li>\n        </ul>\n        <ul>\n        <li>\n
    <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n        </li>\n        </ul>\n
<ul>\n
        <li>\n        <p>An organization, which will include all accounts across your organization.</p>\n
</li>\n        </ul>",
                "smithy.api#required": {}
              }
            },
            "HomeRegion": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowedOperations": {
              "target": "com.amazonaws.licensemanager#AllowedOperationList",
              "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                "smithy.api#required": {}
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },

    "com.amazonaws.licensemanager#CreateGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
     "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
```

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                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",

  "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>"
                }
```

```
        },
        "AllowedOperations": {
          "target": "com.amazonaws.licensemanager#AllowedOperationList",
          "traits": {
            "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "StatusReason": {
          "target": "com.amazonaws.licensemanager#StatusReasonMessage",
          "traits": {
            "smithy.api#documentation": "<p>Grant status reason.</p>"
          }
        },
        "SourceVersion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Current version of the grant.</p>"
          }
        },
        "Options": {
          "target": "com.amazonaws.licensemanager#Options",
          "traits": {
            "smithy.api#documentation": "<p>The options specified for the grant.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
```

```
                "smithy.api#documentation": "<p>Grant status.</p>"
              }
            },
            "Version": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
              }
            }
          },
          "traits":
{
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#CreateLicense": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#RedirectException"
             },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Creates a license.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a license configuration.</p>\n          <p>A license configuration is an abstraction of a customer license agreement that can be\n          consumed and enforced by License Manager. Components include specifications for the license\n          type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n          Dedicated Instance, Dedicated Host, or all of these), license affinity  to host (how long a \n          license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>",
              "smithy.api#required": {}
            }
```

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        },
        "Description": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Description of the license configuration.</p>"
          }
        },
        "LicenseCountingType": {
          "target": "com.amazonaws.licensemanager#LicenseCountingType",
          "traits": {
            "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseCount": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
          }
        },
        "LicenseCountHardLimit": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
          }
        },
        "LicenseRules": {
          "target":
 "com.amazonaws.licensemanager#StringList",
          "traits": {
            "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n          <li>\n            <p>\n              <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
        <code>licenseAffinityToHost</code> |\n            <code>maximumCores</code> |
<code>minimumCores</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n            <code>maximumCores</code> |
<code>minimumCores</code> |\n            <code>maximumSockets</code> | <code>minimumSockets</code> |\n
        <code>maximumVcpus</code> | <code>minimumVcpus</code>\n            </p>\n          </li>\n
<li>\n
  <p>\n              <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n            <code>maximumSockets</code> |
<code>minimumSockets</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n            <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n            </p>\n          </li>\n        </ul>\n        <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
```

<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n <code>True</code> and <code>False</code>. "
                }
            },

  "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": " Tags to add to the license configuration. "
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": " When true, disassociates a resource when software is uninstalled. "
                }
            },
            "ProductInformationList": {
                "target": "com.amazonaws.licensemanager#ProductInformationList",
                "traits": {
                    "smithy.api#documentation": " Product information. "
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"

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        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {

                "target": "com.amazonaws.licensemanager#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                 }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n         For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
```

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            }
          },
          "DestinationLicenseContext":
{
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

        "traits": {
              "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
```

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            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
         }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
         "type": "structure",
         "members": {
            "ReportGeneratorName":
{
               "target": "com.amazonaws.licensemanager#ReportGeneratorName",
               "traits": {
                  "smithy.api#documentation": "<p>Name of the report generator.</p>",
                  "smithy.api#required": {}
               }
            },
            "Type": {
               "target": "com.amazonaws.licensemanager#ReportTypeList",
               "traits": {
                  "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be generated:</p>\n <ul>\n <li>\n <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n </li>\n <li>\n <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n </li>\n </ul>",
                  "smithy.api#required": {}

         }
            },
            "ReportContext": {
               "target": "com.amazonaws.licensemanager#ReportContext",
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            "traits": {
                "smithy.api#documentation": "<p>Defines the type of license configuration the report generator tracks.</p>",
                "smithy.api#required": {}
            }
        },
        "ReportFrequency": {
            "target": "com.amazonaws.licensemanager#ReportFrequency",
            "traits": {
                "smithy.api#documentation": "<p>Frequency by which reports are generated.  Reports can be generated daily, monthly, or weekly.</p>",
                "smithy.api#required": {}
            }
        },
        "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientRequestToken",
            "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                "smithy.api#required": {}
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
                "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
      "type": "structure",
      "members": {
        "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report generator.</p>"
```

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            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product
name.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product SKU.</p>",
              "smithy.api#required": {}
            }
          },
          "Issuer": {
            "target": "com.amazonaws.licensemanager#Issuer",
            "traits": {
              "smithy.api#documentation": "<p>License issuer.</p>",
              "smithy.api#required": {}
            }
          },
          "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Home Region for the license.</p>",
              "smithy.api#required": {}

  }
          },
          "Validity": {
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            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
              "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-UTC format.</p>",
              "smithy.api#required": {}
            }
          },
          "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
              "smithy.api#documentation": "<p>License entitlements.</p>",
              "smithy.api#required": {}
            }
          },
          "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License beneficiary.</p>",
              "smithy.api#required": {}
            }
          },
          "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license.</p>"
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
```

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},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
         },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
```

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            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits":
{
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
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            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>Information about the license.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n          usage.</p>",
                "smithy.api#required": {}
            }
        },

    "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>",
                "smithy.api#required": {}
            }
        },
        "ClientToken": {
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            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          },
          "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the license.</p>"
            }
          }
        },
        "traits": {

 "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>License ARN.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>New version of the license.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output":
{}
        }
      },
      "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
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      "input": {
        "target": "com.amazonaws.licensemanager#CreateTokenRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateTokenResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },

    {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT token used to get an access token. With an access token,\n        you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n        call License Manager to manage the specified license.</p>"
      }
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits":
{
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n        JWT token.</p>",
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                "smithy.api#required": {}
              }
            },
            "RoleArns": {
              "target": "com.amazonaws.licensemanager#ArnList",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n        License Manager does not check whether the roles are in use.</p>"
              }
            },
            "ExpirationInDays": {
              "target": "com.amazonaws.licensemanager#Integer",
              "traits": {
                "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The default is 365 days.</p>"
              }
            },
            "TokenProperties": {
               "target": "com.amazonaws.licensemanager#MaxSize3StringList",
              "traits": {
                "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The data is mapped\n          to the amr claim of the JWT token.</p>"
              }
            },
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientToken",
              "traits": {
                "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#CreateTokenResponse": {
          "type": "structure",
          "members": {
            "TokenId": {
              "target": "com.amazonaws.licensemanager#String",

             "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
              }
            },
            "TokenType": {
              "target": "com.amazonaws.licensemanager#TokenType",
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            "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required": {}
            }
        },
        "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
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            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
          }
        },
        "com.amazonaws.licensemanager#DeleteGrantRequest": {
          "type": "structure",
          "members": {
            "GrantArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
              }
            },
            "StatusReason": {
              "target": "com.amazonaws.licensemanager#StatusReasonMessage",
              "traits": {
                "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
              }
            },
            "Version": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Current version of the
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grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
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            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },

    "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n         <p>You cannot delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members":
{
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
```

```
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
             }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n         <p>This action deletes the report generator, which stops it from generating future reports.\n         The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
         }
      },
      "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
         "type": "structure",
         "members": {
            "LicenseManagerReportGeneratorArn": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {

  "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
         "type": "structure",
         "members": {},
         "traits": {
            "smithy.api#output": {}
         }
```

```
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "SourceVersion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Current version of the license.</p>",
            "smithy.api#required":
{}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseResponse": {
      "type": "structure",
      "members": {
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
          "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
          }
        },
        "DeletionDate": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteToken": {
      "type": "operation",
       "input": {
        "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
```

```
    },
    "output": {
      "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#RedirectException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },

  {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
    }
  },
  "com.amazonaws.licensemanager#DeleteTokenRequest": {
    "type": "structure",
    "members": {
      "TokenId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token ID.</p>",
          "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
```

```
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}

      }
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
      "type": "enum",
      "members": {
        "JWT_PS384": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "JWT_PS384"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#Entitlement": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Entitlement name.</p>",
            "smithy.api#required": {}
          }
        },
        "Value": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
          }
        },
        "MaxCount": {
          "target": "com.amazonaws.licensemanager#Long",
          "traits": {
            "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
          }
        },
        "Overage": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
          }
        },
```

```
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement unit.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowCheckIn": {
                "target":
"com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementData": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement
data value.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
        }
    },
```

```
    "com.amazonaws.licensemanager#EntitlementDataList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#EntitlementData"
      }
    },
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
      "type": "enum",
      "members": {
        "COUNT": {
          "target": "smithy.api#Unit",
          "traits": {

"smithy.api#enumValue": "Count"
          }
        },
        "NONE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "None"
          }
        },
        "SECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Seconds"
          }
        },
        "MICROSECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Microseconds"
          }
        },
        "MILLISECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Milliseconds"
          }
        },
        "BYTES": {
          "target": "smithy.api#Unit",
           "traits": {
            "smithy.api#enumValue": "Bytes"
          }
        },
        "KILOBYTES": {
          "target": "smithy.api#Unit",
```

```
            "traits": {
              "smithy.api#enumValue": "Kilobytes"
            }
          },
          "MEGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Megabytes"
            }
          },
          "GIGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Gigabytes"
            }
          },
          "TERABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Terabytes"
            }
          },
          "BITS":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Bits"
            }
          },
          "KILOBITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Kilobits"
            }
          },
          "MEGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Megabits"
            }
          },
          "GIGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Gigabits"
            }
          },
          "TERABITS": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits"

    }
        },
        "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Percent"
            }
        },
        "BYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes/Second"
            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
        "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes/Second"
            }
        },
        "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits/Second"
            }
        },
```

```
            "KILOBITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
              }
            },
            "MEGABITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue":
"Megabits/Second"
              }
            },
            "GIGABITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
              }
            },
            "TERABITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Terabits/Second"
              }
            },
            "COUNT_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Count/Second"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#EntitlementList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#Entitlement"
          }
        },
        "com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
          "type": "structure",
          "members": {
            "Message": {
              "target": "com.amazonaws.licensemanager#Message"
            }
          },
          "traits": {
```

```
            "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
          }
        },
        "com.amazonaws.licensemanager#EntitlementUnit": {
          "type": "enum",
          "members": {
            "COUNT": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Count"
              }
            },
            "NONE": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "None"
              }
            },
            "SECONDS":
{
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Seconds"
              }
            },
            "MICROSECONDS": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Microseconds"
              }
            },
            "MILLISECONDS": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Milliseconds"
              }
            },
            "BYTES": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Bytes"
              }
            },
            "KILOBYTES": {
              "target": "smithy.api#Unit",
              "traits": {
```

```
        "smithy.api#enumValue": "Kilobytes"
      }
    },
    "MEGABYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Megabytes"
      }
    },
    "GIGABYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Gigabytes"
      }
    },
    "TERABYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Terabytes"
      }
    },
    "BITS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Bits"
      }
    },
    "KILOBITS": {
      "target": "smithy.api#Unit",
      "traits": {

       "smithy.api#enumValue": "Kilobits"
      }
    },
    "MEGABITS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Megabits"
      }
    },
    "GIGABITS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Gigabits"
      }
    },
    "TERABITS": {
      "target": "smithy.api#Unit",
```

```
            "traits": {
                "smithy.api#enumValue": "Terabits"
            }
        },
        "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Percent"
            }
        },
        "BYTES_PER_SECOND": {
            "target":
"smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes/Second"
            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
        "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {

"smithy.api#enumValue": "Terabytes/Second"
            }
        },
        "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits/Second"
            }
        },
```

```
        "KILOBITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits/Second"
          }
        },
        "MEGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabits/Second"
          }
        },
        "GIGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits/Second"
          }
        },

    "TERABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits/Second"
          }
        },
        "COUNT_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Count/Second"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#EntitlementUsage": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Entitlement usage name.</p>",
            "smithy.api#required": {}
          }
        },
        "ConsumedValue": {
          "target": "com.amazonaws.licensemanager#String",

        "traits": {
            "smithy.api#documentation": "<p>Resource usage consumed.</p>",
```

```
                "smithy.api#required": {}
              }
            },
            "MaxCount": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
              }
            },
            "Unit": {
              "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
          }
        },
        "com.amazonaws.licensemanager#EntitlementUsageList":
{
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
          }
        },
        "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
      }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
      "type": "structure",
      "members": {
        "LicenseConsumptionToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License consumption token.</p>",
            "smithy.api#required": {}

    }
        },
        "DryRun": {
          "target": "com.amazonaws.licensemanager#Boolean",
          "traits": {
            "smithy.api#default": false,
            "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action, without actually making the request. Provides an error response if you do not have the required permissions.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
      "type": "structure",
      "members": {
        "LicenseConsumptionToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License consumption token.</p>"
          }
        },
```

```
            "Expiration": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#FailedDependencyException": {
          "type": "structure",
          "members": {
            "Message": {
              "target": "com.amazonaws.licensemanager#Message"
            },
            "ErrorCode": {
              "target": "com.amazonaws.licensemanager#String"
            }
          },
          "traits": {
            "aws.protocols#awsQueryError": {
              "code": "FailedDependency",
              "httpResponseCode": 424
            },
            "smithy.api#documentation":
"<p>A dependency required to run the API is missing.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 424
          }
        },
        "com.amazonaws.licensemanager#Filter": {
          "type": "structure",
          "members": {
            "Name": {
              "target": "com.amazonaws.licensemanager#FilterName",
              "traits": {
                "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
              }
            },
            "Values": {
              "target": "com.amazonaws.licensemanager#FilterValues",
              "traits": {
                "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only
specify one value for the filter.</p>"
              }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter
 name and value pair that is used to return more specific results from a\n          describe operation. Filters can be used
to match a set of resources by specific criteria,\n          such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanager#FilterLimitExceededException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FilterLimitExceeded",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#FilterList": {
        "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#Filter"
        }
    },
    "com.amazonaws.licensemanager#FilterName": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValue": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValues": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#FilterValue",
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#Filters": {
        "type": "list",
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```
        "member": {
          "target": "com.amazonaws.licensemanager#Filter",
          "traits": {
            "smithy.api#xmlName": "item"
          }
        }
      },
      "com.amazonaws.licensemanager#GetAccessToken": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n        are valid for one hour.</p>"
        }
      },
      "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
          "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
              "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
              "smithy.api#required": {}
            }
          },
```

```
            "TokenProperties": {
               "target": "com.amazonaws.licensemanager#MaxSize3StringList",
               "traits": {
                  "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanager#GetAccessTokenResponse":
{
         "type": "structure",
         "members": {
            "AccessToken": {
               "target": "com.amazonaws.licensemanager#TokenString",
               "traits": {
                  "smithy.api#documentation": "<p>Temporary access token.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanager#GetGrant": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#GetGrantRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanager#GetGrantResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"

        },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {
```

```
"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"

 },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
{
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
```

```
    }
  },
  "Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Name of the license configuration.</p>"
     }
  },
  "Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
  },
  "LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
      "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
  },
  "LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
      "smithy.api#documentation": "<p>License rules.</p>"
    }
  },
  "LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

   "traits": {
      "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
  },
  "LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
  },
  "ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
    }
  },
  "Status": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
```

```
                "smithy.api#documentation": "<p>License configuration status.</p>"
              }

        },
          "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
            }
          },
          "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
            }
          },
          "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
             "traits": {
              "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>Product information.</p>"
            }
          },
          "AutomatedDiscoveryInformation": {
            "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
            "traits": {
              "smithy.api#documentation": "<p>Automated discovery information.</p>"
            }
          },
          "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
            }
          }
        },
```

```
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTask": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {

 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
      }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
      "type": "structure",
      "members": {
        "LicenseConversionTaskId": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
          "traits": {
            "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information
on.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
            }
          },
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
            }
          },
          "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information
 about the license type converted from.</p>"
            }
          },
          "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
              "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
          },

    "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
```

```
            }
          },
          "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
          },
          "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

        },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
```

```
            "traits": {

"smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
          "License": {
            "target": "com.amazonaws.licensemanager#License",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },

    "com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
```

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                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {

  "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
        "type": "structure",
        "members": {
            "LicenseUsage": {
                "target":
"com.amazonaws.licensemanager#LicenseUsage",
                "traits": {
                    "smithy.api#documentation": "<p>License usage details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
```

```
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
           },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
      },
      "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "S3BucketArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n        and so on.</p>"

  }
          },
          "SnsTopicArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
```

```
            }
          },
          "OrganizationConfiguration": {
            "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
            }
          },
          "EnableCrossAccountsDiscovery": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
            }

        },
          "LicenseManagerResourceShareArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n        provides member accounts with access to this share.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#Grant": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          },
          "GrantName": {

 "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant name.</p>",
              "smithy.api#required": {}
            }
          },
          "ParentArn": {
            "target": "com.amazonaws.licensemanager#Arn",
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            "traits": {
                "smithy.api#documentation": "<p>Parent ARN.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>License ARN.</p>",
                "smithy.api#required": {}
            }
        },
        "GranteePrincipalArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {

"smithy.api#documentation": "<p>The grantee principal ARN.</p>",
                "smithy.api#required": {}
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "GrantStatus": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>",
                "smithy.api#required": {}
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
             }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>",
                "smithy.api#required": {}
            }
        },
        "GrantedOperations": {
```

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            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
              "smithy.api#documentation": "<p>Granted operations.</p>",
              "smithy.api#required": {}
            }
          },
          "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
              "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation":
"<p>Describes a grant.</p>"
        }
      },
      "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Grant"
        }
      },
      "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
          "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
          },
          "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_ACCEPT"
            }
          },
          "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "REJECTED"

            }
          },
          "ACTIVE": {
            "target": "smithy.api#Unit",
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            "traits": {
              "smithy.api#enumValue": "ACTIVE"
            }
          },
          "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
          },
          "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
          },
          "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_DELETE"
            }
          },
          "DISABLED": {
            "target": "smithy.api#Unit",
            "traits":
{
              "smithy.api#enumValue": "DISABLED"
            }
          },
          "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
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```
            "traits": {
                "smithy.api#documentation": "<p>License name.</p>"
            }

    },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>Granted license issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>Granted license status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
            }
```

```
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
           "traits": {
             "smithy.api#documentation": "<p>License entitlements.</p>"
          }
        },
        "ConsumptionConfiguration": {
          "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
          "traits": {
             "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
          }
        },
        "LicenseMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
             "smithy.api#documentation": "<p>Granted license metadata.</p>"
          }
        },
        "CreateTime": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
             "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

}
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
             "smithy.api#documentation": "<p>Version of the granted license.</p>"
          }
        },
        "ReceivedMetadata": {
          "target": "com.amazonaws.licensemanager#ReceivedMetadata",
          "traits": {
             "smithy.api#documentation": "<p>Granted license received metadata.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
      }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#GrantedLicense"
      }
```

```
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation":
"<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n         <p>For example, you cannot allocate a license to an instance in the process of shutting\n
```

```
down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
      },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the filter.</p>",
              "smithy.api#required": {}
            }
          },
          "Condition": {
            "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
            "traits": {
              "smithy.api#documentation": "<p>Condition of the filter.</p>",
              "smithy.api#required": {}
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
          }

    },
        "traits": {
          "smithy.api#documentation": "<p>An inventory filter.</p>"
        }
      },
     "com.amazonaws.licensemanager#InventoryFilterCondition": {
        "type": "enum",
        "members": {
          "EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "EQUALS"
            }
          },
          "NOT_EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "NOT_EQUALS"
```

```
            }
          },
          "BEGINS_WITH": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "BEGINS_WITH"
            }
          },
          "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
               "smithy.api#enumValue": "CONTAINS"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
      },
      "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Issuer name.</p>",
              "smithy.api#required": {}
            }
          },
          "SignKey": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage
 of sign and verify, \n         and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
      },
      "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
```

```
            "Name": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Issuer name.</p>"
              }
            },
            "SignKey": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
              }
            },
            "KeyFingerprint": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
          }
        },
        "com.amazonaws.licensemanager#License": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
              }
            },
            "LicenseName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {

             "smithy.api#documentation": "<p>License name.</p>"
              }
            },
            "ProductName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
              }
            },
            "ProductSKU": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product SKU.</p>"
            }
          },
          "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
              "smithy.api#documentation": "<p>License issuer.</p>"
            }
          },
          "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

          "smithy.api#documentation": "<p>Home Region of the license.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          },
          "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
              "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
            }
          },
          "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License beneficiary.</p>"
            }
          },
          "Entitlements": {

   "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
              "smithy.api#documentation": "<p>License entitlements.</p>"
            }
          },
          "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
```

```
            }
          },
          "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>License metadata.</p>"
            }
          },
          "CreateTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>License
creation time.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
          "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
            }
          },
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          },
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
          },
          "Description": {
```

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            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license configuration.</p>"
            }
        },
```

```
            "OwnerAccountId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

                }
            },
            "ConsumedLicenseSummaryList": {
                "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
                }
            },
            "ManagedResourceSummaryList": {
                "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
                }
            },
            "ProductInformationList": {
                "target": "com.amazonaws.licensemanager#ProductInformationList",
                "traits": {
                    "smithy.api#documentation": "<p>Product information.</p>"
                }
            },
            "AutomatedDiscoveryInformation": {

                "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
                "traits": {
                    "smithy.api#documentation": "<p>Automated discovery information.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license agreement that can be\n          consumed and enforced by License Manager. Components include specifications for the license\n          type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n          must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
        "type": "structure",
        "members": {
            "ResourceArn":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
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                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
              }
            },
            "ResourceType": {
              "target": "com.amazonaws.licensemanager#ResourceType",
              "traits": {
                "smithy.api#documentation": "<p>Type of server resource.</p>"
              }
            },
            "ResourceOwnerId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource consuming licenses.</p>"
              }
            },
            "AssociationTime": {
              "target": "com.amazonaws.licensemanager#DateTime",
              "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
              }
            },
            "AmiAssociationScope": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
          }
        },
        "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
          }
        },
        "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
          "type": "enum",
          "members":
 {
            "AVAILABLE": {
              "target": "smithy.api#Unit",
              "traits": {
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                "smithy.api#enumValue": "AVAILABLE"
              }
            },
            "DISABLED": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "DISABLED"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
              }
            },
            "ResourceType": {
              "target": "com.amazonaws.licensemanager#ResourceType",
              "traits":
{
                "smithy.api#documentation": "<p>Type of resource.</p>"
              }
            },
            "ResourceStatus": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Status of the resource.</p>"
              }
            },
            "ResourceOwnerId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
              }
            },
            "AssociationTime": {
              "target": "com.amazonaws.licensemanager#DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
              }
            },
```

```
    "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurations": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConfiguration"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionContext": {

    "type": "structure",
        "members": {
          "UsageOperation": {
            "target": "com.amazonaws.licensemanager#UsageOperation",
            "traits": {
              "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you are converting your resource from.  For more information about which platforms correspond to which usage operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n        </p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
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```
        "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n         conversion task.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
                }
            },
            "DestinationLicenseContext": {
                "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the conversion task.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
                }
            },
            "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
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            "traits": {
                "smithy.api#documentation": "<p>The time the usage operation value of the resource was changed.</p>"
            }
        },
        "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskId": {
    "type": "string",
    "traits": {

      "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
    }
},
"com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
    "type": "enum",
    "members": {
        "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "IN_PROGRESS"
            }
        },
        "SUCCEEDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUCCEEDED"
            }
        },
        "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED"
            }
        }
```

```
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
            "VCPU": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "vCPU"
                }
            },
            "INSTANCE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Instance"
                }
            },
            "CORE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Core"
                }
            },
            "SOCKET": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Socket"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseDeletionStatus": {
        "type": "enum",
        "members": {
            "PENDING_DELETE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_DELETE"
                }
            },
            "DELETED": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#License"
        }
      },
      "com.amazonaws.licensemanager#LicenseOperationFailure": {

        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Resource type.</p>"
            }
          },
          "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Error message.</p>"
            }
          },
          "FailureTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {

      "smithy.api#documentation": "<p>Failure time.</p>"
            }
          },
          "OperationName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the operation.</p>"
            }
          },
```

```
            "ResourceOwnerId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
              }
            },
            "OperationRequestedBy": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
              }
            },
            "MetadataList": {

              "target": "com.amazonaws.licensemanager#MetadataList",
              "traits": {
                "smithy.api#documentation": "<p>Reserved.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
          }
        },
        "com.amazonaws.licensemanager#LicenseOperationFailureList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
          }
        },
        "com.amazonaws.licensemanager#LicenseSpecification": {
          "type": "structure",
          "members": {
            "LicenseConfigurationArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

                "smithy.api#required": {}
              }
            },
            "AmiAssociationScope": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
```

```
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
    }
  },
  "com.amazonaws.licensemanager#LicenseSpecifications": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#LicenseSpecification"
    }
  },
  "com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
      "AVAILABLE": {
        "target": "smithy.api#Unit",

      "traits": {
          "smithy.api#enumValue": "AVAILABLE"
        }
      },
      "PENDING_AVAILABLE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PENDING_AVAILABLE"
        }
      },
      "DEACTIVATED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "DEACTIVATED"
        }
      },
      "SUSPENDED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "SUSPENDED"
        }
      },
      "EXPIRED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EXPIRED"
        }
      },
```

```
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_DELETE"
            }
          },
          "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseUsage": {
        "type": "structure",
        "members": {
          "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
            "traits": {
              "smithy.api#documentation": "<p>License entitlement usages.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

        }
      },
      "com.amazonaws.licensemanager#LicenseUsageException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "LicenseUsageFailure",
            "httpResponseCode": 412
          },
          "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 412
        }
      },
      "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
```

```
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {

    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n         <p>Resource associations need not consume licenses from a license
configuration. \n         For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
```

```
                "smithy.api#documentation": "<p>Maximum number of results
to return in a single call.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
          "type": "structure",
          "members": {
            "LicenseConfigurationAssociations": {
              "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
              "traits": {
                "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
              }
            },
            "NextToken": {

 "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#ListDistributedGrants": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
          "type": "structure",
          "members": {
            "GrantArns": {
              "target": "com.amazonaws.licensemanager#ArnList",
              "traits": {

            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n
  <li>\n            <p>\n              <code>GranteePrincipalARN</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>LicenseIssuerName</code>\n
        </p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",

"traits": {
                "smithy.api#documentation": "<p>Distributed grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
    },
    "errors": [
        {
```

```
"target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
         }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
         "type": "structure",
         "members": {
            "LicenseConfigurationArn": {
               "target": "com.amazonaws.licensemanager#String",
                "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
                  "smithy.api#required": {}
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanager#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
               }
            },
            "NextToken": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
```

```
{
        "type": "structure",
        "members": {
          "LicenseOperationFailureList": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
            "traits": {
              "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
```

```
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#Filters",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n          <li>\n            <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n              Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n            Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n          </li>\n          <li>\n
<p>\n              <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n            Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n          <li>\n            <p>\n              <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n            Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n          </li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
```

```
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
    "type": "structure",
    "members": {
      "LicenseConfigurations": {
        "target": "com.amazonaws.licensemanager#LicenseConfigurations",
        "traits": {
          "smithy.api#documentation": "<p>Information about the license configurations.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",

     "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
       },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
```

```
      "traits": {
        "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
      "type": "structure",
      "members": {
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {

   "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#Filters",
          "traits": {
            "smithy.api#documentation": "<p>\n        Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
      "type": "structure",
      "members": {
        "LicenseConversionTasks": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
          "traits": {
            "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
```

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
```

```
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n      <ul>\n        <li>\n          <p>\n            <code>LicenseConfigurationArn</code>\n
</p>\n        </li>\n      </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits":
 {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
      "type": "structure",
      "members": {
        "ReportGenerators": {
          "target": "com.amazonaws.licensemanager#ReportGeneratorList",
          "traits": {
            "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }

      }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
```

```
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {

      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "NextToken": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {
          "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
              "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
          },
          "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

```
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
      "type": "structure",
      "members": {
        "Licenses": {
          "target": "com.amazonaws.licensemanager#LicenseList",
          "traits": {
            "smithy.api#documentation": "<p>License details.</p>"
          }
        },
```

```
"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListLicensesRequest": {
        "type": "structure",
        "members": {
          "LicenseArns": {
```

```
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
            }
          },

      "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n
  <li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>Status</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token
 for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
"smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while specifying the\n          recipient as this Amazon Web Services account, your organization, or an organizational unit\n          (OU) to which this member account belongs.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
        "type": "operation",
        "input": {
```

```
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                "smithy.api#required": {}
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
```

```
<ul>\n <li>\n <p>\n <code>ParentArn</code>\n </p>\n </li>\n
<li>\n <p>\n <code>GranteePrincipalArn</code>\n </p>\n </li>\n </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
              "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
          "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>LicenseIssuerName</code>\n            </p>\n
</li>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n          <li>\n
<p>\n
        <code>GranterAccountId</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
              "smithy.api#documentation": "<p>Received grant details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
```

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicenses": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {

      "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n
          </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
```

```
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
             "traits": {
              "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
        "type": "structure",
        "members": {
          "LicenseArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
            }
          },

           "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>Status</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>IssuerName</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
```

```
<code>Beneficiary</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
               "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
               "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
               "smithy.api#documentation": "<p>Received license details.</p>"
            }
          },

         "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
               "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventory": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
             "target": "com.amazonaws.licensemanager#FailedDependencyException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
             "traits": {
               "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#InventoryFilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n       are supported:</p>\n       <ul>\n       <li>\n       <p>\n       <code>account_id</code>
```

- The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n \n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n <code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
        "type": "structure",
        "members": {
          "ResourceInventoryList": {
            "target": "com.amazonaws.licensemanager#ResourceInventoryList",
            "traits": {
              "smithy.api#documentation": " Information
 about the resources. "
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": " Token for the next set of results. "
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },

```
        "output": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
          "TokenIds": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {

              "smithy.api#documentation": "<p>Token IDs.</p>"
            }
          },
          "Filters": {
```

```
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>LicenseArns</code>\n        </p>\n        </li>\n
</ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
          "Tokens": {
            "target": "com.amazonaws.licensemanager#TokenList",
            "traits": {
              "smithy.api#documentation": "<p>Received token details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n consumption details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
```

```
            },
            "NextToken": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanager#Filters",
               "traits": {
                  "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>resourceArn</code> - The ARN of the license configuration resource.\n
          Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n
 <li>\n                <p>\n                    <code>resourceType</code> - The resource type
(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
    <code>resourceAccount</code> - The ID of the account that owns the resource. \n                Logical operators
are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
         "type": "structure",
         "members": {

 "LicenseConfigurationUsageList": {
               "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
               "traits": {
                  "smithy.api#documentation": "<p>Information about the license configurations.</p>"
               }
            },
            "NextToken": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
```

```
    "com.amazonaws.licensemanager#Location": {
      "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
      "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
      "type": "structure",
      "members": {
        "ResourceType":
{
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
          }
        },
        "AssociationCount": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
      }
    },
    "com.amazonaws.licensemanager#ManagedResourceSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
      }
    },
    "com.amazonaws.licensemanager#MaxSize100": {

    "type": "integer",
      "traits": {
        "smithy.api#range": {
          "min": 1,
          "max": 100
        }
      }
    },
    "com.amazonaws.licensemanager#MaxSize3StringList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#String"
      },
```

```
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 3
        }
      }
    },
    "com.amazonaws.licensemanager#Message": {
      "type": "string"
    },
    "com.amazonaws.licensemanager#Metadata": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>The key name.</p>"
          }
        },

    "Value": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>The value.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
      }
    },
    "com.amazonaws.licensemanager#MetadataList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#Metadata"
      }
    },
    "com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement maximum count is reached.</p>",
```

```
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#Options": {
        "type": "structure",
        "members": {
            "ActivationOverrideBehavior": {
                "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
                "traits": {
                    "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of activating a grant.\n          Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter.</p>\n          <ul>\n             <li>\n                <p>As a license administrator, you can optionally specify an\n                   <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n             </li>\n             <li>\n                <p>As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n                   account in your organization.</p>\n             </li>\n             <li>\n                <p>As a grantee, if the grantor creating the distributed grant doesnt specify an\n                   <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n                   are activating the grant.</p>\n             </li>\n          </ul>\n          <dl>\n             <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n             <dd>\n                <p>Use this value to activate a grant without replacing any member accounts\n                   active grants for the same product.</p>\n             </dd>\n             <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n             <dd>\n                <p>Use this value to activate a grant and disable other active grants in any\n                   member accounts\n                    for the same product. This action will also replace their\n                   previously activated grants with this activated grant.</p>\n             </dd>\n          </dl>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant, such as activation\n          override behavior. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#OrganizationConfiguration": {
        "type": "structure",
        "members": {
            "EnableIntegration": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation":
 "<p>Enables Organizations integration.</p>",
                    "smithy.api#required": {}
                }
            }
```

```
        },
        "traits": {
          "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
      },
      "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 1
          }
        }
      },
      "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Resource type. The
 possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductInformationFilterList": {
            "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
            "traits": {
              "smithy.api#documentation": "<p>A Product information filter consists of a
 <code>ProductInformationFilterComparator</code> which is a logical operator, a
 <code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
 <code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n          <p>Accepted values
 for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
 <code>ProductInformationFilterComparator</code>. </p>\n          <p>The following filters and are supported when
 the resource type \n          is <code>SSM_MANAGED</code>:</p>\n
          <ul>\n            <li>\n              <p>\n                <code>Application Name</code> - The name of the
 application.\n                Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
 <p>\n                <code>Application Publisher</code> - The publisher of the application.\n                Logical
 operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n              <p>\n
 <code>Application Version</code> - The version of the application.\n                Logical operator is
 <code>EQUALS</code>.</p>\n            </li>\n            <li>\n              <p>\n                <code>Platform
 Name</code> - The name of the platform.\n                Logical operator is <code>EQUALS</code>.</p>\n
 </li>\n            <li>\n              <p>\n                <code>Platform Type</code> - The platform type.\n
 Logical operator is <code>EQUALS</code>.</p>\n
```

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</li>\n <li>\n <p>\n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n </p>\n </li>\n <li>\n <p>\n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>.</p>\n </li>\n </ul>\n <p>The following filters and logical operators are supported when the resource type\n is <code>RDS</code>:</p>\n <ul>\n <li>\n <p>\n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>.</p>\n </li>\n <li>\n <p>\n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n
<code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>.</p>\n
</li>\n </ul>",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": "<p>Filter name.</p>",
"smithy.api#required": {}
}
},
"ProductInformationFilterValue": {
"target": "com.amazonaws.licensemanager#StringList",

"traits": {
"smithy.api#documentation": "<p>Filter value.</p>"
}
},
"ProductInformationFilterComparator": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
```

```
            "smithy.api#documentation": "<p>Logical operator.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
      }
    },
    "com.amazonaws.licensemanager#ProductInformationFilterList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
      }
    },
    "com.amazonaws.licensemanager#ProductInformationList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
       }
    },
    "com.amazonaws.licensemanager#ProvisionalConfiguration": {
      "type": "structure",
      "members": {
        "MaxTimeToLiveInMinutes": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
      }
    },
    "com.amazonaws.licensemanager#RateLimitExceededException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "RateLimitExceeded",
          "httpResponseCode": 429
        },
```

```
            "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 429
          }
        },
        "com.amazonaws.licensemanager#ReceivedMetadata": {
          "type": "structure",
          "members": {
            "ReceivedStatus": {
              "target": "com.amazonaws.licensemanager#ReceivedStatus",
              "traits": {
                "smithy.api#documentation": "<p>Received status.</p>"
              }
            },
            "ReceivedStatusReason": {
              "target": "com.amazonaws.licensemanager#StatusReasonMessage",
              "traits": {
                "smithy.api#documentation": "<p>Received
 status reason.</p>"
              }
            },
            "AllowedOperations": {
              "target": "com.amazonaws.licensemanager#AllowedOperationList",
              "traits": {
                "smithy.api#documentation": "<p>Allowed operations.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
          }
        },
        "com.amazonaws.licensemanager#ReceivedStatus": {
          "type": "enum",
          "members": {
            "PENDING_WORKFLOW": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "PENDING_WORKFLOW"
              }
            },
            "PENDING_ACCEPT": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue":
 "PENDING_ACCEPT"
              }
```

```
        },
        "REJECTED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "REJECTED"
          }
        },
        "ACTIVE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "ACTIVE"
          }
        },
        "FAILED_WORKFLOW": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "FAILED_WORKFLOW"
          }
        },
        "DELETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DELETED"
          }
        },
        "DISABLED": {
          "target": "smithy.api#Unit",
           "traits": {
            "smithy.api#enumValue": "DISABLED"
          }
        },
        "WORKFLOW_COMPLETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "WORKFLOW_COMPLETED"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#RedirectException": {
      "type": "structure",
      "members": {
        "Location": {
          "target": "com.amazonaws.licensemanager#Location",
          "traits": {
            "smithy.api#httpHeader": "Location"
          }
        },
```

```
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
             "smithy.api#error": "client",
            "smithy.api#httpError": 308
        }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
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```
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#RenewType":
{
      "type": "enum",
      "members": {
        "NONE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "None"
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            }
          },
          "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Weekly"
            }
          },
          "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Monthly"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ReportContext": {
        "type": "structure",
        "members": {
          "licenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {

        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this
generator reports on.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
        }
      },
      "com.amazonaws.licensemanager#ReportFrequency": {
        "type": "structure",
        "members": {
          "value": {
            "target": "com.amazonaws.licensemanager#Integer",
            "traits": {
              "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated.  \n        The only supported value is <code>1</code>.</p>"
            }
          },
          "period": {
            "target": "com.amazonaws.licensemanager#ReportFrequencyType",

           "traits": {
              "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
```

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or monthly.</p>"
                }
              }
            },
            "traits": {
              "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
            }
          },
          "com.amazonaws.licensemanager#ReportFrequencyType": {
            "type": "enum",
            "members": {
              "DAY": {
                "target": "smithy.api#Unit",
                "traits": {
                  "smithy.api#enumValue": "DAY"
                }
              },
              "WEEK": {
                "target": "smithy.api#Unit",
                "traits": {
                  "smithy.api#enumValue": "WEEK"
                }
              },
              "MONTH": {
                "target": "smithy.api#Unit",
                "traits":
{
                  "smithy.api#enumValue": "MONTH"
                }
              }
            }
          },
          "com.amazonaws.licensemanager#ReportGenerator": {
            "type": "structure",
            "members": {
              "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                  "smithy.api#documentation": "<p>Name of the report generator.</p>"
                }
              },
              "ReportType": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                  "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
                }
              },
              "ReportContext": {
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```
            "target": "com.amazonaws.licensemanager#ReportContext",
            "traits": {
              "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
            }
          },
          "ReportFrequency": {
            "target": "com.amazonaws.licensemanager#ReportFrequency",
            "traits": {
              "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
            }
          },
          "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
            }
          },
          "LastRunStatus": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
            }
          },
          "LastRunFailureReason":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
            }
          },
          "LastReportGenerationTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
            }
          },
          "ReportCreatorAccount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
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```
        "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
          },
          "S3Location": {
            "target": "com.amazonaws.licensemanager#S3Location",
            "traits": {
              "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
            }
          },
          "CreateTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Time the report was created.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
            }

      }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
        }
      },
      "com.amazonaws.licensemanager#ReportGeneratorList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#ReportGenerator"
        }
      },
      "com.amazonaws.licensemanager#ReportGeneratorName": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          }
        }
      },
      "com.amazonaws.licensemanager#ReportType": {
        "type": "enum",
        "members": {
          "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
            }

      },
          "LICENSE_CONFIGURATION_USAGE_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "LicenseConfigurationUsageReport"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ReportTypeList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#ReportType"
        }
      },
      "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
          "ResourceId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the resource.</p>"
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits":
{
              "smithy.api#documentation": "<p>Type of resource.</p>"
            }
          },
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
          },
          "Platform": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Platform of the resource.</p>"
            }
          },
```

```
            "PlatformVersion": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
               }
            },
            "ResourceOwningAccountId":
{
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
         }
      },
      "com.amazonaws.licensemanager#ResourceInventoryList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#ResourceInventory"
         }
      },
      "com.amazonaws.licensemanager#ResourceLimitExceededException": {
         "type": "structure",
         "members": {
            "Message": {
               "target": "com.amazonaws.licensemanager#Message"
            }
         },
         "traits": {
            "aws.protocols#awsQueryError": {
               "code": "ResourceLimitExceeded",

                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
         }
      },
      "com.amazonaws.licensemanager#ResourceNotFoundException": {
         "type": "structure",
         "members": {
            "Message": {
               "target": "com.amazonaws.licensemanager#Message"
            }
```

```
    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "InvalidResource.NotFound",
        "httpResponseCode": 400
      },
      "smithy.api#documentation": "<p>The resource cannot be found.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
    }
  },
  "com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
      "EC2_INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_INSTANCE"
        }
      },
      "EC2_HOST": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_HOST"
        }
      },
      "EC2_AMI": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_AMI"
        }
      },
      "RDS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "RDS"
        }
      },
      "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
           "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#S3Location": {
    "type": "structure",
```

```
      "members": {
        "bucket": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
          }
        },
        "keyPrefix": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
      }
    },
    "com.amazonaws.licensemanager#ServerInternalException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "InternalError",
          "httpResponseCode": 500
        },
        "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
        "smithy.api#error": "server",
        "smithy.api#httpError": 500
      }
    },
    "com.amazonaws.licensemanager#SignedToken": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 4096
        }
      }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
      "type": "string",
      "traits":
```

```
{
            "smithy.api#length": {
               "min": 0,
               "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
         }
      },
      "com.amazonaws.licensemanager#String": {
         "type": "string"
      },
      "com.amazonaws.licensemanager#StringList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#String"
         }
      },
      "com.amazonaws.licensemanager#Tag": {
         "type": "structure",
         "members": {
            "Key": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Tag key.</p>"
               }
            },
            "Value": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation":
"<p>Tag value.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
         }
      },
      "com.amazonaws.licensemanager#TagKeyList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#String"
         }
      },
      "com.amazonaws.licensemanager#TagList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#Tag"
```

```
        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
          {
            "target":
 "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits":
 {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>One or more tags.</p>",
```

```
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#TagResourceResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#TokenData": {
          "type": "structure",
          "members": {
            "TokenId": {
              "target": "com.amazonaws.licensemanager#String",
               "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
              }
            },
            "TokenType": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
              }
            },
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
              }
            },
            "ExpirationTime": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
 format.</p>"
              }
            },
            "TokenProperties": {
              "target": "com.amazonaws.licensemanager#MaxSize3StringList",
              "traits": {
                "smithy.api#documentation": "<p>Data specified by the caller.</p>"
```

```
            }
          },
          "RoleArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
            }
          }
        },
        "traits": {

          "smithy.api#documentation": "<p>Describes a token.</p>"
        }
      },
      "com.amazonaws.licensemanager#TokenList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#TokenData"
        }
      },
      "com.amazonaws.licensemanager#TokenString": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 4096
          },
          "smithy.api#pattern": "^\\S+$"
        }
      },
      "com.amazonaws.licensemanager#TokenType": {
        "type": "enum",
        "members": {
          "REFRESH_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "REFRESH_TOKEN"
            }
          }
        }
```

```
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",
```

```
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
               "smithy.api#required": {}
            }
          },
          "TagKeys": {
            "target": "com.amazonaws.licensemanager#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
        },
        "output": {

 "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
```

```
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseConfigurationStatus": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
                "traits": {
                    "smithy.api#documentation": "<p>New status of the license configuration.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {

    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
    configuration is licenseAffinityToHost.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
```

```
                "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
              }
            },
            "Name": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>New name
 of the license configuration.</p>"
              }
            },
            "Description": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>New description of the license configuration.</p>"
              }
            },
            "ProductInformationList": {
              "target": "com.amazonaws.licensemanager#ProductInformationList",
              "traits": {
                "smithy.api#documentation": "<p>New product information.</p>"
              }
            },
            "DisassociateWhenNotFound": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
              }
            }
          },
          "traits":
{
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
          },
          "output": {
```

```
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n         <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
```

```
                "smithy.api#documentation": "<p>Name of the report generator.</p>",
                "smithy.api#required": {}
              }
            },
            "Type": {
              "target": "com.amazonaws.licensemanager#ReportTypeList",
              "traits": {
                "smithy.api#documentation":
 "<p>Type of reports to generate. The following report types are supported:</p>\n          <ul>\n            <li>\n
<p>License configuration report - Reports the number and details of consumed licenses for a license
configuration.</p>\n            </li>\n            <li>\n              <p>Resource report - Reports the tracked licenses and
resource consumption for a license configuration.</p>\n            </li>\n          </ul>",
                "smithy.api#required": {}
              }
            },
            "ReportContext": {
              "target": "com.amazonaws.licensemanager#ReportContext",
              "traits": {
                "smithy.api#documentation": "<p>The report context.</p>",
                "smithy.api#required": {}
              }
            },
            "ReportFrequency": {
              "target": "com.amazonaws.licensemanager#ReportFrequency",
              "traits":
 {
                "smithy.api#documentation": "<p>Frequency by which reports are generated.</p>",
                "smithy.api#required": {}
              }
            },
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientRequestToken",
              "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            },
            "Description": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
```

```
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n          <p>You can update the license specifications of AMIs, instances, and
hosts.\n          You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
        }
    },
```

```
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
            "smithy.api#required": {}
          }
        },
        "AddLicenseSpecifications": {
          "target": "com.amazonaws.licensemanager#LicenseSpecifications",
          "traits": {
            "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
          }
        },
        "RemoveLicenseSpecifications": {
          "target": "com.amazonaws.licensemanager#LicenseSpecifications",
          "traits": {
            "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
```

```
        }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#UsageOperation": {
          "type": "string",
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 50
            }
          }
        },
        "com.amazonaws.licensemanager#ValidationException": {
          "type": "structure",
          "members": {
            "Message": {
              "target": "com.amazonaws.licensemanager#Message"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

         "smithy.api#error": "client",
            "smithy.api#httpError": 400
          }
        }
      }
    }
    CheckoutLicense
     Initialize stack step
      spanInitializeStart
      RegisterServiceMetadata
      legacyEndpointContextSetter
      SetLogger
      OperationInputValidation
      spanInitializeEnd
     Serialize stack step
```

spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.110 grpc-gateway 2.26.3

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1.111 github.com/grpc-ecosystem/grpc-gateway/v2 2.26.3

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1.112 protobuf-go 1.36.6

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1.114 curl 8.12.1-r1

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1.115 go-systemd 22.5.0

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1.116 logrus 1.9.3

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1.117 perks 1.0.1

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1.119 github.com/aws/aws-sdk-go-v2/service/dynamodbstreams 1.25.3

1.119.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
```

```
//
//   - Status
//
//
  - Fingerprint
//
//   - IssuerName
//
//   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
```

```
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
```

```
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
  name: License Scan
  runs-on: ubuntu-latest
  strategy:
   matrix:
    python-version: [3.9]

  steps:
   - name: Checkout target
     uses: actions/checkout@v2
     with:
      path: sdkbase
      ref: ${{ github.base_ref }}
   - name: Checkout this ref
     uses: actions/checkout@v2
     with:
      path: new-ref
      fetch-depth: 0
   - name: Get Diff
     run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
   - name: Get Target Files
     run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
   - name: Checkout scancode
     uses: actions/checkout@v2
     with:
      repository: nexB/scancode-toolkit
      path: scancode-toolkit
      fetch-depth: 1
   - name: Set up Python ${{ matrix.python-version }}
     uses: actions/setup-python@v2
     with:
      python-version: ${{ matrix.python-version }}
   # ScanCode
   - name: Self-configure scancode
     working-directory: ./scancode-toolkit
```

```
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
```

```
    RequestIDRetriever
    OperationDeserializer
    AddTimeOffsetMiddleware
    RecordResponseTiming
    RequestResponseLogger
  ListLicenses
   Initialize stack step
    spanInitializeStart
    RegisterServiceMetadata
    legacyEndpointContextSetter
    SetLogger
    spanInitializeEnd
   Serialize stack step
    spanBuildRequestStart
    setOperationInput
    ResolveEndpoint
    OperationSerializer
   Build stack step
    ClientRequestID
    ComputeContentLength
    SetCredentialSourceMiddleware
    UserAgent
    AddTimeOffsetMiddleware
    RecursionDetection
    spanBuildRequestEnd
   Finalize stack step
    spanRetryLoop
    Retry
    RetryMetricsHeader
    ResolveAuthScheme
    GetIdentity
    ResolveEndpointV2
    disableHTTPS
    ComputePayloadHash
    setLegacyContextSigningOptions
    Signing
   Deserialize stack step
    AddRawResponseToMetadata
    ErrorCloseResponseBody
    CloseResponseBody
    ResponseErrorWrapper
    RequestIDRetriever
    OperationDeserializer
    AddTimeOffsetMiddleware
    RecordResponseTiming
    RequestResponseLogger
  // Code generated by smithy-go-codegen DO NOT EDIT.
```

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
```

```
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
LicenseArn *string
```

```
// License status.
Status types.LicenseStatus

// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
 err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
```

```
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err
 = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
```

```
 params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
```

```
err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
```

```
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {
```

```
 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
```

```
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
```

```
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.
```

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32
```

```
 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
```

```
 return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
 return err
 }
 if err = addRetry(stack, options); err != nil {
 return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
 return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
 err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
```

```
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
```

OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent

AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry

```
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
```

```
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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```
AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
```

```
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
```

```
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
```

```
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
```

```
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return err
}
if err = addRequestResponseLogging(stack, options);
err != nil {
 return err
}
if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
}
if err = addSpanInitializeStart(stack); err != nil {
 return err
}
if err = addSpanInitializeEnd(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
     "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
        "type": "integer"
     },
     "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
        "type": "long"
     },
     "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
        "type": "operation",
        "input": {
           "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
        },
        "output": {
           "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
        },
        "errors": [
           {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
           },
           {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
           },

     {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
           },
           {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/DeregisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of name to filter by.</p>"
            }
          },
          "Values": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
```

```
            "traits": {
                "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
            }
          },
          "Operator": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
            "traits": {
              "smithy.api#documentation": "<p>An operator for filtering results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
           },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
```

registered to your account. ",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
          "type": "structure",
          "members": {
            "SubscriptionProviderArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation":
 " The Amazon Resource Name (ARN) of the BYOL registration resource to get details for. ",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
          "type": "structure",
          "members": {
            "SubscriptionProviderArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": " The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request. "
              }
            },
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

           "traits": {
                "smithy.api#documentation": " The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request. "
              }
            },
            "SecretArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
              "traits": {
                "smithy.api#documentation": " The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request. "

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            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
```

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      "traits": {
        "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/GetServiceSettings"

        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
      "type": "structure",
      "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
      "type": "structure",
      "members": {
        "LinuxSubscriptionsDiscovery": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
          "traits": {
            "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
          }
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
          "traits": {
            "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has been enabled, and which Regions data will be aggregated from.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
          }
        },
        "StatusMessage": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
          "traits": {
            "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
          }
        },
        "HomeRegions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
```

```
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
            "AmiId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
                }
            },
            "InstanceID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
                }
            },
            "InstanceType": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>The instance type of the resource.</p>"
                }
            },
            "AccountID": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the instance.</p>"
                }
            },
            "Region": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
                }
            },
            "UsageOperation": {
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            "target": "smithy.api#String",

    "traits": {
                "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
          },
          "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
              "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
          },
          "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
          },
          "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
          },
          "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
            }
          },
          "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
          },
          "SubscriptionProviderUpdateTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
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registered \n\t\t\tthird-party Linux subscription provider.</p>"
                }
            },
            "DualSubscription": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
                }
            },
            "RegisteredWithSubscriptionProvider": {
                "target": "smithy.api#String",
                "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
         },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
        }
    ],
    "traits": {
        "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
             "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
            "additionalAllowedHeaders": [
                "*",
                "content-type",
                "x-amz-content-sha256",
```

```
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
               "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
 configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
```

```
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseFIPS"
                        },
                        true
                      ]
                    }

        ],
                  "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                  "type": "error"
                },
                {
                  "conditions": [],
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            {
                              "ref": "UseDualStack"
                            },
                            true
                          ]

}
                      ],
                      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                      "type": "error"
                    },
                    {
                      "conditions": [],
                      "endpoint": {
```

```
                "url": {
                  "ref": "Endpoint"
                },
                "properties": {},
                "headers": {}
              },
              "type": "endpoint"
            }
          ],
          "type": "tree"

      }
      ],
      "type": "tree"
    },
    {
      "conditions": [],
      "rules": [
        {
          "conditions": [
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              "fn": "isSet",
              "argv": [
                {
                  "ref": "Region"
                }
              ]
            }
          ],
          "rules": [
            {
              "conditions": [
                {

      "fn": "aws.partition",
                    "argv": [
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
```

```
                "argv": [
                  {

                "ref": "UseFIPS"
                  },
                  true
                ]
              },
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }

],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"

},
                              "supportsFIPS"
                          ]
                        }
                      ]
                  },
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [

                       {
                            "ref": "PartitionResult"
```

```
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],

    "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],

                "type": "tree"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {

        "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseFIPS"
                            },
                            true
```

```
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

                "fn": "booleanEquals",
                    "argv": [
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      },
                      true

                  ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "rules": [
                      {
                        "conditions": [],
                        "endpoint": {
                          "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                          "headers": {}
                        },
                        "type": "endpoint"
                      }
                    ],
                    "type": "tree"
                  }
                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "FIPS is enabled
```

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but this partition does not support FIPS",
                                    "type": "error"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true

                    ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [
                                        {
                                            "fn": "booleanEquals",
                                            "argv": [
                                                true,
                                                {
                                                    "fn": "getAttr",
                                                    "argv": [
                                                        {

                                                            "ref": "PartitionResult"
                                                        },
                                                        "supportsDualStack"
                                                    ]
                                                }
                                            ]
                                        }
                                    ],
                                    "rules": [
                                        {
                                            "conditions": [],
                                            "rules": [

        {
                                                    "conditions": [],
                                                    "endpoint": {
                                                        "url": "https://license-manager-linux-
```

```
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                "properties": {},
                                                "headers": {}
                                            },
                                            "type": "endpoint"
                                        }
                                    ],
                                    "type": "tree"

                            }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [],
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
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                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
                ],
                "type": "tree"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "error": "Invalid Configuration: Missing Region",
        "type": "error"
    }
```

```
        ],
        "type": "tree"
      }
    ]
  },
  "smithy.rules#endpointTests": {
    "testCases": [
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

    }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {

     "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
```

```
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
                }

        },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                }
```

```
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }

     },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
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                {
                  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
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                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
                    }
                  },
                  "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                  }
                },
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
                    }
                  },
                  "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
                  "expect": {
                    "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
                  },
                  "params": {

               "Region": "us-iso-east-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                    }
                  },
                  "params": {
                    "Region": "us-iso-east-1",
```

```
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS":
false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
```

```
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {

     "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }

},
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
```

```
disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://example.com"
                      }
                    },
                    "params": {
                      "UseFIPS": false,
                      "UseDualStack": false,
                      "Endpoint": "https://example.com"
                    }
                  },
                  {

                    "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                    "expect": {
                      "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": true,
                      "UseDualStack": false,
                      "Endpoint": "https://example.com"
                    }
                  },
                  {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {

 "Region": "us-east-1",
                      "UseFIPS": false,
                      "UseDualStack": true,
                      "Endpoint": "https://example.com"
                    }
                  },
                  {
                    "documentation": "Missing region",
                    "expect": {
                      "error": "Invalid Configuration: Missing Region"
                    }
                  }
                ],
                "version": "1.0"
              }
            }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled LinuxSubscriptionsDiscovery"

    },
          {
            "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled LinuxSubscriptionsDiscovery"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
      "type": "structure",
      "members": {
        "SourceRegions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "OrganizationIntegration": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
          "traits": {
            "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
      },
```

```
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

  {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n          <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n          <ul>\n            <li>\n
  <p>\n                <code>AccountID</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
      <code>AmiID</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
<code>DualSubscription</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
<code>InstanceID</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
```

<code>InstanceType</code>\n \n \n \n \n
<code>ProductCode</code>\n \n \n \n \n
<code>Region</code>\n \n \n \n \n
<code>Status</code>\n \n \n \n \n
<code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n
<code>contains</code>\n \n \n \n \n
<code>equals</code>\n \n \n \n \n
<code>Notequal</code>\n \n \n "
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": " The maximum items to return in a request. "
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": " An array that contains instance objects. "
            }
          },
          "NextToken": {

       "target": "smithy.api#String",
            "traits": {

```
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",

   "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
```

```
            "Filters": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n      <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n      <p>The valid names for this filter are:</p>\n      <ul>\n        <li>\n          <p>\n            <code>Subscription</code>\n          </p>\n        </li>\n      </ul>\n      <p>The valid Operators for this filter are:</p>\n      <ul>\n        <li>\n          <p>\n            <code>contains</code>\n          </p>\n        </li>\n        <li>\n          <p>\n            <code>equals</code>\n          </p>\n        </li>\n        <li>\n          <p>\n            <code>Notequal</code>\n          </p>\n        </li>\n      </ul>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                "smithy.api#length": {
                  "min": 1,
                  "max": 16384
                }
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
          "type": "structure",
          "members": {
            "Subscriptions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
              "traits": {
                "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
              }
            },
            "NextToken": {
```

```
            "target": "smithy.api#String",
             "traits": {
               "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSources": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
          "traits": {
            "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
            "smithy.api#range": {
              "min": 1,
              "max": 100
            }
          }

  },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
      "type": "structure",
      "members": {
        "RegisteredSubscriptionProviders": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
          "traits": {
            "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
          }
        },

       "NextToken": {
          "target": "smithy.api#String",
          "traits": {
```

```
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
          },
          "errors": [
            {

         "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
            "smithy.api#http": {
              "method": "GET",
              "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
          "type": "structure",
          "members": {
            "resourceArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
               "traits": {
                 "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
```

```
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
      "type": "structure",
      "members": {
        "tags": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "EQUAL",
            "value": "Equal",
            "documentation": "Equal operator"
          },
          {
            "name": "NOT_EQUAL",
            "value": "NotEqual",
            "documentation": "Not equal operator"
          },
          {
            "name": "CONTAINS",
            "value": "Contains",
            "documentation": "Contains operator"
          }
        ],
        "smithy.api#length": {
          "min": 1,
          "max": 20
        }
      }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "Enabled",
            "value": "Enabled",
            "documentation": "Enabled OrganizationIntegration"
          },
          {
            "name": "Disabled",
            "value": "Disabled",
            "documentation": "Disabled OrganizationIntegration"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
       },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
        "smithy.api#http": {
```

```
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"

            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
          "type": "structure",
          "members": {
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
              "traits": {
                "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                "smithy.api#required": {}
              }
            },
            "SecretArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the
 Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                "smithy.api#required": {}
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
          "type": "structure",
          "members": {
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
              "traits": {
                "smithy.api#documentation":
 "<p>The Linux subscription provider that you registered.</p>"
              }
```

```
            },
            "SubscriptionProviderArn": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
               }
            },
            "SubscriptionProviderStatus": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
         "type": "structure",
         "members": {
            "SubscriptionProviderArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
               }
            },
            "SubscriptionProviderSource": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
               "traits": {
                  "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
               }
            },
            "SecretArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
               }
            },
            "SubscriptionProviderStatus": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits":
{
                "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
```

```
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

    }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "InProgress",
              "value": "InProgress",
              "documentation": "InProgress status"
            },
            {
              "name": "Completed",
              "value": "Completed",
              "documentation": "Completed status"
            },
            {
              "name": "Successful",
              "value": "Successful",
              "documentation": "Successful status"
            },
            {
              "name": "Failed",
              "value": "Failed",
              "documentation": "Failed status"
            }
          ]
        }
      },

      "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#length": {
              "min": 1,
              "max": 100
            }
          }
        },
        "traits": {
          "smithy.api#length": {
```

```
                "min": 1,
                "max": 100
            },
            "smithy.api#uniqueItems": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
{
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
```

```
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [

 {
                    "name": "RedHat",
                    "value": "RedHat",
                    "documentation": "RedHat subscription provider namespace"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",

   "documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
```

```
                "documentation": "PENDING status"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
          "type": "list",
          "member": {
            "target": "smithy.api#String"
          },
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 50
            },
            "smithy.api#sensitive": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
           },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
              "method": "PUT",
              "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
```

```
        "type": "structure",
        "members":
{
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation":
"<p>The request was denied due to request throttling.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
        "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{resourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "resourceArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
```

```
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            },
            "tagKeys": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
              "traits": {

            "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                "smithy.api#httpQuery": "tagKeys",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

         },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
```

```
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
          "type": "structure",
          "members": {
            "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required": {}
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowUpdate": {
              "target":
 "smithy.api#Boolean",
              "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux
subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home
Region.</p>"
              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
          "type": "structure",
          "members": {
            "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
```

```
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                 "traits": {
                   "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
                }
             },
             "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                   "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
                }
             },
             "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                   "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
                }

       },
             "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                   "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated data for Linux\n      subscriptions.</p>"
                }
             }
          }
       },
       "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
          "type": "structure",
          "members": {
             "message": {
                "target": "smithy.api#String"
             }
          },
          "traits": {
             "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
             "smithy.api#error": "client"
          }
       }
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string
```

```
 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
```

```
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData
```

```
// Key fingerprint identifying the license.
//
// This member is required.
KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
```

```
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
```

RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash

setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
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{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
        "type": "structure",
        "members": {
            "DirectoryId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
                "traits": {
                    "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
                }
            },
            "ActiveDirectorySettings":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
                }
            },
            "ActiveDirectoryType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
            },
            "DomainIpv4List": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 2
              }
            }
          },
          "DomainCredentialsProvider": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
            }
          },
          "DomainNetworkSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "SELF_MANAGED",
              "value": "SELF_MANAGED",
              "documentation": "SELF_MANAGED type of Active Directory"
            },
            {
              "name": "AWS_MANAGED",
              "value": "AWS_MANAGED",
              "documentation": "AWS_MANAGED type of Active Directory"
            }
          ]
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n          <note>\n             <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n          </note>",
            "smithy.api#http":
```

```
{
            "code": 200,
            "method": "POST",
            "uri": "/user/AssociateUser"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
              "smithy.api#required": {}
            }
          },
           "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The identity provider for the user.</p>",
              "smithy.api#required": {}
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to associate.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
            }
          }
        },
        "traits": {
```

```
    "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
      "type": "structure",
      "members": {
        "InstanceUserSummary": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
        "smithy.api#error": "server"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
```

```
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
```

```
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
          ],
          "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
          }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
      "type": "structure",
      "members": {
        "LicenseServerEndpointArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
            "smithy.api#required": {}
          }
        },
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
      "type": "structure",
      "members": {
        "LicenseServerEndpoint": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
          "traits": {
            "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
      },
      "errors": [
```

```
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
          "type": "structure",
          "members": {
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
```

Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"IdentityProviderArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) that identifies the identity provider to deregister. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
"type": "structure",
"members": {
"IdentityProviderSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the results of an identity provider operation. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#output": {}

}
},
"com.amazonaws.licensemanagerusersubscriptions#Directory": {
"type": "string",
"traits": {
"smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
}
},
"com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
},
"output": {
"target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
},

```
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
```

```
                "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based subscriptions.</p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity provider.</p>"
              }
            },
            "InstanceUserArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance.</p>"
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to disassociate.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
          "type": "structure",
```

```
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
              "smithy.api#length": {
                "min": 1
              },

    "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Attribute": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
            }
          },
          "Operation": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
            }
          },
          "Value": {
            "target": "smithy.api#String",
            "traits":
 {
              "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
```

```
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
      "type": "union",
      "members": {
        "ActiveDirectoryIdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
      "type": "structure",
      "members": {
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Settings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
            "smithy.api#required": {}
          }
        },
        "Product": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the
identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
            }
          },
          "FailureMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
        "type": "list",
        "member": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
        "type": "structure",
        "members": {
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
              "smithy.api#required": {}
            }
```

```
            },
            "Products": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
                "traits": {
                  "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                  "smithy.api#required": {}
               }
            },
            "LastStatusCheckDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The date of the last status check.</p>"
               }
            },
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                  "smithy.api#required": {}
               }
            },
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                  "smithy.api#required": {}
```

```
            }
        },

    "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                "smithy.api#required": {}
            }
        },
        "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
             }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
            }
        },
        "Domain": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
            }
        },
        "AssociationDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
            }
        },
        "DisassociationDate": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
           "smithy.api#error": "server",
          "smithy.api#httpError": 500
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
```

```
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

      "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
```

```
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager User Subscriptions",
                "arnNamespace": "license-manager-user-subscriptions",
                "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-user-subscriptions"
            },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
                "additionalAllowedHeaders": [
                    "*",
                    "content-type",
                    "x-amz-content-sha256",
                    "x-amz-user-agent",
                    "x-amzn-platform-id",
                    "x-amzn-trace-id",
                    "content-length",

             "x-api-key",
                    "authorization",
                    "x-amz-date",
                    "x-amz-security-token",
                    "Access-Control-Allow-Headers",
                    "Access-Control-Allow-Methods",
                    "Access-Control-Allow-Origin"
                ],
                "additionalExposedHeaders": [
                    "x-amzn-errortype",
                    "x-amzn-requestid",
                    "x-amzn-trace-id"
                ]
            },
            "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to
utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager User Subscriptions",
            "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
                    "Region":
{
                        "builtIn": "AWS::Region",
                        "required": false,
                        "documentation": "The AWS region used to dispatch the request.",
                        "type": "String"
                    },
                    "UseDualStack": {
```

```
            "builtIn": "AWS::UseDualStack",
            "required": true,
            "default": false,
            "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
            "type": "Boolean"
          },
          "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
```

```
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [
                  {

                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },

"properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Region"
                    }
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
```

```
                {
                  "fn": "aws.partition",

                 "argv": [
                    {
                      "ref": "Region"
                    }
                  ],
                  "assign": "PartitionResult"
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseFIPS"
                        },

true
                      ]
                    },
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseDualStack"
                        },
                        true
                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [
                        {

"fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
                              "argv": [
                                {
                                  "ref": "PartitionResult"
                                },
```

```
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },

                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
                        }

            ]
                }
            ],
            "rules": [
                {
                    "conditions": [],
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }

    ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
```

```
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [

{
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "fn": "getAttr",
                            "argv": [

                {
                              "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                          ]
                        },
                        true
                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {

          "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                        "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }
                  ],
                  "type": "tree"
                },
                {
                  "conditions": [],
```

```
                    "error": "FIPS is enabled but this partition does not support FIPS",
                    "type": "error"

    }
                ],
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {

        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]

         }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}
```

```
                                    },
                                    "type": "endpoint"
                                }

                            ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
        ]
    },
    "smithy.rules#endpointTests": {
        "testCases": [
            {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                "expect":
{
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                    }
```

```
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",

"UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
```

```
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS":
true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
```

```
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
         "UseDualStack": true
      }
    },
    {
```

```
            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
              "Region": "us-iso-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
              }
            },
            "params": {
              "Region": "us-iso-east-1",
              "UseFIPS": true,
              "UseDualStack": false

    }
          },
          {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "error": "DualStack is enabled but this partition does not support DualStack"
            },
            "params": {
              "Region": "us-iso-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
```

```
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
        }

    },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-isob-east-1",
```

```
  "UseFIPS": false,
                    "UseDualStack": true
                }
            },
            {
                "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
                    }
                },
                "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
                "expect": {

                 "endpoint": {
                        "url": "https://example.com"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                }
            },
            {
                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://example.com"
                    }
                },
                "params": {
                    "UseFIPS": false,
                    "UseDualStack":
 false,
                    "Endpoint": "https://example.com"
                }
            },
            {
```

```
                "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                "expect": {
                  "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                  "error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "Missing region",
                "expect": {
                  "error": "Invalid Configuration: Missing Region"
                }
              }
            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
        "type": "structure",
        "members": {
          "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
               "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
          },
          "HealthStatus": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
        },
        "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Information
 about a Remote Desktop Services (RDS) license server.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
    "type": "structure",
    "members": {
        "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
            }
        },
        "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>"
            }
        },
        "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

  "traits": {
                "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
            }
        },
```

```
            "LicenseServerEndpointId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits":
{
                    "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
                }
            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
                }
            },

           "CreationTime": {
                "target": "smithy.api#Timestamp",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
```

```
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

"type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "PROVISIONING",
            "value": "PROVISIONING",
            "documentation": ""
          },
          {
            "name": "PROVISIONING_FAILED",
            "value": "PROVISIONING_FAILED",
            "documentation": ""
          },
          {
            "name": "PROVISIONED",
            "value": "PROVISIONED",
            "documentation": ""
          },
          {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""

          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
```

```
                    "name": "HEALTHY",
                    "value": "HEALTHY",
                    "documentation": ""
                },
                {
                    "name": "UNHEALTHY",
                    "value": "UNHEALTHY",
                    "documentation": ""
                },
                {
                    "name": "NOT_APPLICABLE",
                    "value": "NOT_APPLICABLE",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
```

```
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {

            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
             },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
```

```
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use
 the following filters to streamline results:</p>\n        <ul>\n        <li>\n        <p>Product</p>\n        </li>\n
        <li>\n        <p>DirectoryId</p>\n        </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

          "traits": {
              "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources
that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
              "smithy.api#required": {}
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
```

```
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
      "type": "operation",
       "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },

    {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/instance/ListInstances"
        },
        "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
```

```
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members":
{
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n
        <li>\n            <p>InstanceId</p>\n          </li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
            }
          },
          "NextToken": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next
 token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/license-server/ListLicenseServerEndpoints"
          },
```

```
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "LicenseServerEndpoints"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
             "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>IdentityProviderArn</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
```

```
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type":
 "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
{
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
```

```
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>Username</p>\n
</li>\n          <li>\n          <p>Domain</p>\n          </li>\n          </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating.
 This is the nextToken \n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
          "type": "structure",
          "members": {
            "ProductUserSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service
 hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
          },
```

```
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#readonly": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}

           }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
            }
          }
```

```
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
         }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListUserAssociations"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceUserSummaries"
```

```
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
          "type": "structure",
          "members": {
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which
 provides user-based subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
 request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {

        "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n        <ul>\n
    <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n          </li>\n
<li>\n            <p>Domain</p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
 \n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
      "type": "structure",
      "members": {
        "InstanceUserSummaries": {

         "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
      "type": "structure",
      "members": {
        "Username":
{
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
            "smithy.api#required": {}
          }
        },
        "Product": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
            "smithy.api#required": {}
          }
        },
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
            "smithy.api#required": {}
```

```
            }
          },
           "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
            }
          },
          "SubscriptionStartDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
          },
          "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
```

```
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
          "RdsSalCredentialsProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider":
 {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target":
```

```
 "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
         "type": "structure",
         "members": {
            "IdentityProvider": {

     "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                  "smithy.api#required": {}
               }
            },
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
                  "smithy.api#required": {}
               }
            },
            "Settings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
               "traits":
 {
                  "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
               }
```

```
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
              "traits": {
                "smithy.api#documentation":
 "<p>Metadata that describes the results of an identity provider operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",

       "smithy.api#error": "client",
            "smithy.api#httpError": 404
          }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
      "type": "structure",
      "members": {
        "SecretId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
            "smithy.api#length": {
              "min": 1
            }
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
      "type": "string",
      "traits": {
        "smithy.api#length": {

         "min": 5,
          "max": 200
        },
        "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
      "type": "structure",
      "members": {
        "Endpoint": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
      "type": "union",
      "members": {
```

```
        "RdsSalSettings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
           "traits": {
             "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "RDS_SAL",
            "value": "RDS_SAL",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
      "type": "structure",
      "members": {
        "message": {

  "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
          "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {
      "type": "structure",
      "members": {
        "Subnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
            "smithy.api#length": {
              "min": 1
            },
            "smithy.api#required": {}
```

```
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

           "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

         },
          {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n        <note>\n          <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/StartProductSubscription"
          }

    }
     },
     "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
       "type": "structure",
       "members": {
         "Username": {
           "target": "smithy.api#String",
           "traits": {
             "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
             "smithy.api#required": {}
           }
         },
         "IdentityProvider": {
           "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
           "traits": {
             "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
             "smithy.api#required": {}
           }
         },
         "Product": {
           "target": "smithy.api#String",
           "traits": {

  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n        <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n</p>",
             "smithy.api#required": {}
           }
         },
         "Domain": {
           "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }

 }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

    },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
```

```
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

    },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/StopProductSubscription"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
              }
            },
            "IdentityProvider": {
              "target":
 "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
```

Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n "
}
},
"ProductUserArn": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
"traits": {
"smithy.api#documentation": " The Amazon Resource Name (ARN) of the product user. "

}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
"type": "structure",
"members": {
"ProductUserSummary": {
"target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
"traits": {
"smithy.api#documentation": " Metadata that describes the start product subscription
operation. ",
"smithy.api#required": {}
}

}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#StringList": {
"type": "list",
"member": {
"target": "smithy.api#String"
}
},
"com.amazonaws.licensemanagerusersubscriptions#Subnet": {

```
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {

 "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation":
 "<p>Adds tags to a resource.</p>",
        "smithy.api#http": {
```

```
            "method": "PUT",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation":
 "<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
```

```
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {

             "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
```

```
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want to remove tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}

        }
          },
          "TagKeys": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
              "smithy.api#httpQuery": "tagKeys",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {

      "code": 200,
               "method": "POST",
               "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
         "type": "structure",
         "members": {
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },

            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to update.</p>"
               }
            },
            "UpdateSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
               "traits": {
                  "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n <ul>\n            <li>\n               <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n            <li>\n               <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n            <li>\n               <p>Security
```

```
group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
            "AddSubnets": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
                    "smithy.api#required": {}
                }
            },
            "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that
 allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for
activation servers.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration settings such as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A parameter is not valid.</p>",
          "smithy.api#error": "client"
        }
      }
    }
}
```


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ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step

```
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 Retry
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
```

```
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
```

```
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
```

```
string) *awsmiddleware.RegisterServiceMetadata {
return &awsmiddleware.RegisterServiceMetadata{
 Region:        region,
 ServiceID:     ServiceID,
 OperationName: "CheckInLicense",
}
}
```

```
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpResponseCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
      },
      {
        "id": "Service",
        "namespace": "*"
      }
    ]
  },
  "shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
      "type": "service",
      "version": "2018-08-01",
      "operations": [
        {
          "target": "com.amazonaws.licensemanager#AcceptGrant"
        },

 {
          "target": "com.amazonaws.licensemanager#CheckInLicense"
```

```
},
{
   "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
},
{
   "target": "com.amazonaws.licensemanager#CheckoutLicense"
},
{
   "target": "com.amazonaws.licensemanager#CreateGrant"
},
{
   "target": "com.amazonaws.licensemanager#CreateGrantVersion"
},
{
   "target": "com.amazonaws.licensemanager#CreateLicense"
},
{
   "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
},
{
   "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
},
{
   "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
 },
{
   "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
},
{
   "target": "com.amazonaws.licensemanager#CreateToken"
},
{
   "target": "com.amazonaws.licensemanager#DeleteGrant"
},
{
   "target": "com.amazonaws.licensemanager#DeleteLicense"
},
{
   "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
},
{
   "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
},
{
   "target": "com.amazonaws.licensemanager#DeleteToken"
},
{
   "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"
```

```
},
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseUsage"
    },
    {
      "target": "com.amazonaws.licensemanager#GetServiceSettings"
    },
    {
      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
     },
    {
      "target": "com.amazonaws.licensemanager#ListDistributedGrants"
    },
    {
      "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
    },
    {
      "target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
    },
    {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
    },
    {
      "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
    },
    {
      "target": "com.amazonaws.licensemanager#ListLicenses"
    },
    {
```

```
    "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
  },
  {

   "target": "com.amazonaws.licensemanager#ListLicenseVersions"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedGrants"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
  },
  {
    "target": "com.amazonaws.licensemanager#ListResourceInventory"
  },
  {
    "target": "com.amazonaws.licensemanager#ListTagsForResource"
  },
  {
    "target": "com.amazonaws.licensemanager#ListTokens"
  },
  {
    "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
   },
  {
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    "target": "com.amazonaws.licensemanager#UntagResource"
  },
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  {
    "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
  },
  {
    "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
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                "cloudFormationName": "LicenseManager",
                "cloudTrailEventSource": "licensemanager.amazonaws.com",
                "endpointPrefix": "license-manager"
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            "aws.protocols#awsJson1_1": {},
            "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software vendors across multiple \n         Amazon Web Services accounts and on-premises servers.</p>",
            "smithy.api#title": "AWS License Manager",
            "smithy.api#xmlNamespace": {
                "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
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            "smithy.rules#endpointRuleSet": {
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                        "documentation": "The AWS region used to dispatch the request.",
                        "type": "String"
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                        "required": true,
                        "default": false,
                        "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                        "type": "Boolean"
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                        "builtIn": "AWS::UseFIPS",
                        "required": true,
                        "default": false,
                        "documentation": "When true, send
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                        "type": "Boolean"
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              }
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              "type": "error"
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                              "ref": "PartitionResult"
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                        "argv": [
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                            "ref": "PartitionResult"
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"supportsDualStack"
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manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
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        "type": "error"
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      "params": {
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        "UseDualStack": false
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        "UseFIPS": false,
        "UseDualStack": false
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        "Region": "ap-northeast-3",
        "UseFIPS": false,
        "UseDualStack": false
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      "params": {
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            "UseDualStack": false
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            "UseFIPS": false,
            "UseDualStack": false
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disabled and DualStack disabled",
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            "UseDualStack": false
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            "Region":
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                "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
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                    "UseDualStack": false
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                "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
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          "params": {
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            "UseFIPS": false,
            "UseDualStack": false
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            "endpoint": {
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"https://license-manager.cn-north-1.amazonaws.com.cn"
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            "UseDualStack": false
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          "UseDualStack": true
        }
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        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
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        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
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      "expect": {
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        }
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      "params": {
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        "UseDualStack": false
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      },
```

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                    }
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                    "UseDualStack": false
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            },
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                "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
                "expect": {
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but this partition does not support DualStack"
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            "UseDualStack": true
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        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },

      {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
```

```
                "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
                  }
                },

        "params": {
                  "Region": "us-isob-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                  "error": "DualStack is enabled but this partition does not support DualStack"
                },
                "params": {
                  "Region": "us-isob-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true
                }
              },
              {
                "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

    "expect": {
                  "endpoint": {
                    "url": "https://example.com"
                  }
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://example.com"
                  }
                },
                "params": {
```

```
                    "UseFIPS": false,

        "UseDualStack": false,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                  "expect": {
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                  "expect": {
                    "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "Missing region",
                  "expect": {
                    "error": "Invalid Configuration: Missing Region"
                  }
                }
              ],
              "version": "1.0"
            }
          }
        },
        "com.amazonaws.licensemanager#AcceptGrant": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#AcceptGrantRequest"
```

```
},
        "output": {
            "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"

    }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
```

```
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant
ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {

  "code": "ServiceAccessDenied",
            "httpResponseCode": 401
          },
          "smithy.api#documentation": "<p>Access to resource denied.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 401
        }
      },
      "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
        "type": "enum",
        "members": {
          "DISTRIBUTED_GRANTS_ONLY": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
            }
          },
          "ALL_GRANTS_PERMITTED_BY_ISSUER": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#AllowedOperation": {

    "type": "enum",
        "members": {
          "CREATE_GRANT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CreateGrant"
            }
          },
          "CHECKOUT_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckoutLicense"
            }
          },
          "CHECKOUT_BORROW_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckoutBorrowLicense"
            }
          },
          "CHECK_IN_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckInLicense"
            }
          },
          "EXTEND_CONSUMPTION_LICENSE":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ExtendConsumptionLicense"
            }
          },
```

```
            "LIST_PURCHASED_LICENSES": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "ListPurchasedLicenses"
               }
            },
            "CREATE_TOKEN": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "CreateToken"
               }
            }
         }
      },
      "com.amazonaws.licensemanager#AllowedOperationList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#AllowedOperation"
         },
         "traits": {
            "smithy.api#length": {
               "min": 1,
               "max":
7
               }
            }
         }
      },
      "com.amazonaws.licensemanager#Arn": {
         "type": "string",
         "traits": {
            "smithy.api#length": {
               "min": 0,
               "max": 2048
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
         }
      },
      "com.amazonaws.licensemanager#ArnList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#Arn"
         }
      },
      "com.amazonaws.licensemanager#AuthorizationException": {
         "type": "structure",
         "members": {
            "Message": {
```

```
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError":
{
            "code": "AuthorizationFailure",
            "httpResponseCode": 403
          },
          "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n        policy associated with this account.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 403
        }
      },
      "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
          "LastRunTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
      },

    "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
          "smithy.api#default": false
        }
      },
      "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
          "AllowEarlyCheckIn": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                "smithy.api#required": {}
            }
        }

},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

     },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
```

```
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
              "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
          }
        },
        "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
          "type": "structure",
          "members":
{
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must use the borrow consumption configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
              "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
              "smithy.api#required": {}
            }
          },
          "DigitalSignatureMethod": {
            "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
            "traits": {
              "smithy.api#documentation": "<p>Digital signature method. The possible value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
              "smithy.api#required": {}
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
          },
          "CheckoutMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Information about constraints.</p>"
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
```

```
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License consumption token.</p>"
            }
          },
          "EntitlementsAllowed":
{
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
          },
          "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
              "smithy.api#documentation": "<p>Signed token.</p>"
            }
          },
          "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
            }
          },
          "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
            }
          },
          "CheckoutMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Information about constraints.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target":
"com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n        <p>If the account that created the license is the same that is performing the check out, you must\n        specify the account as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",

    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
```

```
        },
        "Beneficiary": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License beneficiary.</p>"
          }
        },
        "NodeId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Node ID.</p>"
          }
        }
      },
      "traits": {

     "smithy.api#input": {}
      }
  },
  "com.amazonaws.licensemanager#CheckoutLicenseResponse": {
      "type": "structure",
      "members": {
        "CheckoutType": {
          "target": "com.amazonaws.licensemanager#CheckoutType",
          "traits": {
            "smithy.api#documentation": "<p>Checkout type.</p>"
          }
        },
        "LicenseConsumptionToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License consumption token.</p>"
          }
        },
        "EntitlementsAllowed": {
          "target": "com.amazonaws.licensemanager#EntitlementDataList",
          "traits": {
            "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
          }
        },
         "SignedToken": {
          "target": "com.amazonaws.licensemanager#SignedToken",
          "traits": {
            "smithy.api#documentation": "<p>Signed token.</p>"
          }
        },
        "NodeId": {
          "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
          },
          "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
          },
          "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
            }
          },
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutType": {
        "type": "enum",
        "members": {
          "PROVISIONAL": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PROVISIONAL"
            }
          },
          "PERPETUAL": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PERPETUAL"
            }
           }
        }
      },
      "com.amazonaws.licensemanager#ClientRequestToken": {
        "type": "string",
        "traits": {
```

```
            "smithy.api#length": {
              "min": 1,
              "max": 36
            }
          }
        },
        "com.amazonaws.licensemanager#ClientToken": {
          "type": "string",
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 2048
            },
            "smithy.api#pattern": "^\\S+$"
          }
        },
        "com.amazonaws.licensemanager#ConflictException": {
          "type": "structure",
          "members": {
            "Message": {
              "target": "com.amazonaws.licensemanager#Message"
            }
          },
          "traits": {
            "aws.protocols#awsQueryError": {
              "code": "ConflictException",
              "httpResponseCode":
409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
          }
        },
        "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
          "type": "structure",
          "members": {
            "ResourceType": {
              "target": "com.amazonaws.licensemanager#ResourceType",
              "traits": {
                "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
              }
            },
            "ConsumedLicenses": {
              "target": "com.amazonaws.licensemanager#BoxLong",
              "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
```

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            }
          }
        },

"traits": {
          "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
      }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
      "type": "structure",
      "members": {
        "RenewType": {
          "target": "com.amazonaws.licensemanager#RenewType",
          "traits": {
            "smithy.api#documentation": "<p>Renewal frequency.</p>"
          }
        },
        "ProvisionalConfiguration": {
          "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
           }
        },
        "BorrowConfiguration": {
          "target": "com.amazonaws.licensemanager#BorrowConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
      }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateGrantRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateGrantResponse"
      },
```

```
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target":
 "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
 license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
 organizational unit (OU). For more
  information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
 licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
 idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          },
          "GrantName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant name.</p>",
              "smithy.api#required": {}
```

```
    }
        },
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Principals": {
          "target": "com.amazonaws.licensemanager#PrincipalArnList",
          "traits": {
            "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN):</p>\n <ul>\n <li>\n <p>An Amazon Web Services account, which includes only the account specified.</p>\n </li>\n </ul>\n <ul>\n <li>\n <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n </li>\n </ul>\n <ul>\n <li>\n <p>An organization, which will include all accounts across your organization.</p>\n </li>\n </ul>",
            "smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the grant.</p>",
            "smithy.api#required": {}
          }
        },
        "AllowedOperations": {
          "target": "com.amazonaws.licensemanager#AllowedOperationList",
          "traits": {
            "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },

    "com.amazonaws.licensemanager#CreateGrantResponse": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
```

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            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",

  "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
```

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            "StatusReason": {
              "target": "com.amazonaws.licensemanager#StatusReasonMessage",
              "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
              }
            },
            "SourceVersion": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
              }
            },
            "Options": {
              "target": "com.amazonaws.licensemanager#Options",
              "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
          "type": "structure",
          "members": {
            "GrantArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanager#GrantStatus",
              "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
              }
            },
            "Version": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
              }
            }
          },
          "traits":
{
            "smithy.api#output": {}
```

```
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
         },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

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            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n         <p>A license configuration is an abstraction of a customer license agreement that can be\n         consumed and enforced by License Manager. Components include specifications for the license\n         type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n         Dedicated Instance, Dedicated Host, or all of these), license affinity  to host (how long a \n         license must be associated with a host), and the number of licenses purchased and used.</p>"
         }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
         "type": "structure",
         "members": {
            "Name": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                  "smithy.api#required": {}
               }
            },
            "Description": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Description of the license configuration.</p>"
               }
            },
            "LicenseCountingType": {
               "target": "com.amazonaws.licensemanager#LicenseCountingType",
               "traits": {
                  "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                  "smithy.api#required": {}
               }
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            },
            "LicenseCount": {
               "target": "com.amazonaws.licensemanager#BoxLong",
               "traits": {
                  "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
               }
            },
            "LicenseCountHardLimit": {
               "target": "com.amazonaws.licensemanager#BoxBoolean",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n         blocks the launch of new instances.</p>"
               }
            },
            "LicenseRules": {
               "target":
 "com.amazonaws.licensemanager#StringList",
               "traits": {
                  "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n         vary by dimension, as follows.</p>\n
<ul>\n            <li>\n               <p>\n                  <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
          <code>licenseAffinityToHost</code> |\n               <code>maximumCores</code> |
<code>minimumCores</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n               <code>maximumCores</code> |
<code>minimumCores</code> |\n               <code>maximumSockets</code> | <code>minimumSockets</code> |\n
         <code>maximumVcpus</code> | <code>minimumVcpus</code>\n               </p>\n            </li>\n
<li>\n
  <p>\n                  <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n               <code>maximumSockets</code> |
<code>minimumSockets</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n               <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n               </p>\n            </li>\n         </ul>\n         <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n         values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"
               }
            },

   "Tags": {
               "target": "com.amazonaws.licensemanager#TagList",
               "traits": {
                  "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
               }
            },
            "DisassociateWhenNotFound": {
               "target": "com.amazonaws.licensemanager#BoxBoolean",
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            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>Product information.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
           },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

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            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
         }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
         "type": "structure",
         "members": {
            "ResourceArn": {

               "target": "com.amazonaws.licensemanager#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting the license type for.</p>",
                  "smithy.api#required": {}
               }
            },
            "SourceLicenseContext": {
               "target": "com.amazonaws.licensemanager#LicenseConversionContext",
               "traits": {
                  "smithy.api#documentation": "<p>Information that identifies the license type you are converting from. \n\n         For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in the <i>License Manager User Guide</i>.</p>",
                  "smithy.api#required": {}
               }
            },
            "DestinationLicenseContext":
 {
               "target": "com.amazonaws.licensemanager#LicenseConversionContext",
               "traits": {
                  "smithy.api#documentation": "<p>Information that identifies the license type you are converting to. For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in the <i>License Manager User Guide</i>.</p>",
                  "smithy.api#required": {}
               }
            }
```

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    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
    "type": "structure",
    "members": {
      "LicenseConversionTaskId": {
        "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

   "traits": {
            "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
       },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
```

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            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
          "ReportGeneratorName":
{
            "target": "com.amazonaws.licensemanager#ReportGeneratorName",
            "traits": {
              "smithy.api#documentation": "<p>Name of the report generator.</p>",
              "smithy.api#required": {}
            }
          },
          "Type": {
            "target": "com.amazonaws.licensemanager#ReportTypeList",
            "traits": {
              "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be generated:</p>\n <ul>\n <li>\n <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n </li>\n <li>\n <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n </li>\n </ul>",
              "smithy.api#required": {}

        }
          },
          "ReportContext": {
            "target": "com.amazonaws.licensemanager#ReportContext",
            "traits": {
              "smithy.api#documentation": "<p>Defines the type of license configuration the report generator tracks.</p>",
              "smithy.api#required": {}
            }
          },
          "ReportFrequency": {
            "target": "com.amazonaws.licensemanager#ReportFrequency",
            "traits": {
              "smithy.api#documentation": "<p>Frequency by which reports are generated.  Reports can be generated daily, monthly, or weekly.</p>",
              "smithy.api#required": {}
            }
```

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            },
            "ClientToken": {
               "target": "com.amazonaws.licensemanager#ClientRequestToken",
               "traits": {
                  "smithy.api#documentation": "<p>Unique,
 case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                  "smithy.api#required": {}
               }
            },
            "Description": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Description of the report generator.</p>"
               }
            },
            "Tags": {
               "target": "com.amazonaws.licensemanager#TagList",
               "traits": {
                  "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
         "type": "structure",
         "members": {
            "LicenseManagerReportGeneratorArn":
 {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
 generator.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanager#CreateLicenseRequest": {
         "type": "structure",
         "members": {
            "LicenseName": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
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                "smithy.api#documentation": "<p>License name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product
name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>",
                "smithy.api#required": {}
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#Issuer",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>",
                "smithy.api#required": {}
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region for the license.</p>",
                "smithy.api#required": {}

    }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                "smithy.api#required": {}
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
            }
```

```
            },
            "Beneficiary": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>",
                "smithy.api#required": {}
              }
            },
            "ConsumptionConfiguration": {
              "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
              "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage.</p>",
                "smithy.api#required": {}
              }
            },
            "LicenseMetadata": {
              "target": "com.amazonaws.licensemanager#MetadataList",
              "traits": {
                "smithy.api#documentation": "<p>Information about the license.</p>"
              }
            },
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientToken",
              "traits": {
                "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#CreateLicenseResponse": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanager#LicenseStatus",
              "traits": {
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```
            "smithy.api#documentation": "<p>License status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersion": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target":
"com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#Issuer",
                "traits":
{
                    "smithy.api#documentation": "<p>License issuer.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Validity": {
                "target": "com.amazonaws.licensemanager#DatetimeRange",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
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UTC format.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license.</p>"
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                    "smithy.api#required": {}
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n          usage.</p>",
                    "smithy.api#required": {}
                }
            },

  "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>",
                    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>"
                }
            }
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        },
        "traits": {

"smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New version of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output":
{}
        }
    },
    "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
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            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },

      {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n          <p>A refresh token is a JWT token used to get an access token. With an access token,\n          you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n          call License Manager to manage the specified license.</p>"
          }
        },
        "com.amazonaws.licensemanager#CreateTokenRequest": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits":
{
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n          JWT token.</p>",
                "smithy.api#required": {}
              }
            },
            "RoleArns": {
              "target": "com.amazonaws.licensemanager#ArnList",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n          License Manager does not check whether the roles are in use.</p>"
              }
            },
            "ExpirationInDays": {
              "target": "com.amazonaws.licensemanager#Integer",
              "traits": {
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                "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The default is 365 days.</p>"
            }
          },
          "TokenProperties": {
            "target": "com.amazonaws.licensemanager#MaxSize3StringList",
            "traits": {
              "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The data is mapped\n to the amr claim of the JWT token.</p>"
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
        "members": {
          "TokenId": {
            "target": "com.amazonaws.licensemanager#String",

            "traits": {
              "smithy.api#documentation": "<p>Token ID.</p>"
            }
          },
          "TokenType": {
            "target": "com.amazonaws.licensemanager#TokenType",
            "traits": {
              "smithy.api#documentation": "<p>Token type.</p>"
            }
          },
          "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
              "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
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    }
  },
  "com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
  },
  "com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
      "Begin": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Start of the time range.</p>",
          "smithy.api#required": {}
        }
      },
      "End": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>End of the time range.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
    }
  },
  "com.amazonaws.licensemanager#DeleteGrant": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
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                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
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            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
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                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },

    "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n         <p>You cannot delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members":
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{
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>ID of the license configuration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
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            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n        <p>This action deletes the report generator, which stops it from generating future reports.\n        The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
          "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {

 "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          },
          "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
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            "traits": {
              "smithy.api#documentation": "<p>Current version of the license.</p>",
              "smithy.api#required":
{}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          },
          "DeletionDate": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteToken": {
        "type": "operation",
         "input": {
          "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
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            },
            {
              "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },

        {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
          }
        },
        "com.amazonaws.licensemanager#DeleteTokenRequest": {
          "type": "structure",
          "members": {
            "TokenId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#DeleteTokenResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}

        }
        },
        "com.amazonaws.licensemanager#DigitalSignatureMethod": {
          "type": "enum",
          "members": {
            "JWT_PS384": {
              "target": "smithy.api#Unit",
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            "traits": {
              "smithy.api#enumValue": "JWT_PS384"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#Entitlement": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement name.</p>",
              "smithy.api#required": {}
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
            }
          },
          "MaxCount": {
            "target": "com.amazonaws.licensemanager#Long",
            "traits": {
              "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
            }
          },
          "Overage": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
            }
          },
          "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementUnit",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement unit.</p>",
              "smithy.api#required": {}
            }
          },
          "AllowCheckIn": {
            "target":
"com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
            }
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            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementData": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data name.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement
data value.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement data unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
        }
    },
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "enum",
        "members": {
            "COUNT": {
                "target": "smithy.api#Unit",
                "traits": {
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"smithy.api#enumValue": "Count"
                }
            },
            "NONE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "None"
                }
            },
            "SECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Seconds"
                }
            },
            "MICROSECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Microseconds"
                }
            },
            "MILLISECONDS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Milliseconds"
                }
            },
            "BYTES": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Bytes"
                }
            },
            "KILOBYTES": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobytes"
                }
            },
            "MEGABYTES": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabytes"
                }
            },
            "GIGABYTES": {
                "target": "smithy.api#Unit",
                "traits": {
```

```
                "smithy.api#enumValue": "Gigabytes"
            }
        },
        "TERABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes"
            }
        },
        "BITS":
{
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bits"
            }
        },
        "KILOBITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobits"
            }
        },
        "MEGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits"
            }
        },
        "GIGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits"
            }
        },
        "TERABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits"

    }
        },
        "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Percent"
            }
        },
        "BYTES_PER_SECOND": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Bytes/Second"
            }
          },
          "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Kilobytes/Second"
            }
          },
          "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Megabytes/Second"
            }
          },
          "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
             "traits": {
              "smithy.api#enumValue": "Gigabytes/Second"
            }
          },
          "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Terabytes/Second"
            }
          },
          "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Bits/Second"
            }
          },
          "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Kilobits/Second"
            }
          },
          "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue":
"Megabits/Second"
            }
          },
```

```
            "GIGABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabits/Second"
                }
            },
            "TERABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Terabits/Second"
                }
            },
            "COUNT_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Count/Second"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#EntitlementList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Entitlement"
        }
    },
    "com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#EntitlementUnit": {
        "type": "enum",
        "members": {
            "COUNT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Count"
                }
```

```
        },
        "NONE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "None"
          }
        },
        "SECONDS":
{
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Seconds"
          }
        },
        "MICROSECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Microseconds"
          }
        },
        "MILLISECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Milliseconds"
          }
        },
        "BYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bytes"
          }
        },
        "KILOBYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobytes"
           }
        },
        "MEGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabytes"
          }
        },
        "GIGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes"
```

```
    }
},
"TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabytes"
    }
},
"BITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Bits"
    }
},
"KILOBITS": {
    "target": "smithy.api#Unit",
    "traits": {

     "smithy.api#enumValue": "Kilobits"
    }
},
"MEGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Megabits"
    }
},
"GIGABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Gigabits"
    }
},
"TERABITS": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Terabits"
    }
},
"PERCENT": {
    "target": "smithy.api#Unit",
    "traits": {
        "smithy.api#enumValue": "Percent"
    }
},
"BYTES_PER_SECOND": {
    "target":
```

```
"smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Bytes/Second"
            }
          },
          "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Kilobytes/Second"
            }
          },
          "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Megabytes/Second"
            }
          },
          "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Gigabytes/Second"
            }
          },
          "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {

"smithy.api#enumValue": "Terabytes/Second"
            }
          },
          "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Bits/Second"
            }
          },
          "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Kilobits/Second"
            }
          },
          "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Megabits/Second"
            }
          },
```

```
        "GIGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits/Second"
          }
        },

    "TERABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits/Second"
          }
        },
        "COUNT_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Count/Second"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#EntitlementUsage": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Entitlement usage name.</p>",
            "smithy.api#required": {}
          }
        },
        "ConsumedValue": {
          "target": "com.amazonaws.licensemanager#String",

        "traits": {
            "smithy.api#documentation": "<p>Resource usage consumed.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxCount": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
          }
        },
        "Unit": {
          "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
          "traits": {
```

```
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
          }
        },
        "com.amazonaws.licensemanager#EntitlementUsageList":
{
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
          }
        },
        "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
```

```
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}

     }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },

            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
```

```
    "com.amazonaws.licensemanager#FailedDependencyException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        },
        "ErrorCode": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "FailedDependency",
          "httpResponseCode": 424
        },
        "smithy.api#documentation":
"<p>A dependency required to run the API is missing.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 424
      }
    },
    "com.amazonaws.licensemanager#Filter": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#FilterName",
          "traits": {
            "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
          }
        },
        "Values": {
          "target": "com.amazonaws.licensemanager#FilterValues",
          "traits": {
            "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only
specify one value for the filter.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A filter
 name and value pair that is used to return more specific results from a\n        describe operation. Filters can be used
to match a set of resources by specific criteria,\n        such as tags, attributes, or IDs.</p>"
      }
    },
    "com.amazonaws.licensemanager#FilterLimitExceededException": {
      "type": "structure",
      "members": {
        "Message": {
```

```
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#FilterList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#Filter"
    }
},
"com.amazonaws.licensemanager#FilterName": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
    "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#FilterValue",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#Filters": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Filter",
        "traits": {
            "smithy.api#xmlName": "item"
        }
    }
},
"com.amazonaws.licensemanager#GetAccessToken": {
    "type": "operation",
    "input": {
         "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
    },
```

```
        "output": {
            "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n          are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
```

```
    "com.amazonaws.licensemanager#GetAccessTokenResponse":
{
        "type": "structure",
        "members": {
            "AccessToken": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Temporary access token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

      },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
```

```
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {

"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
```

```
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"

 },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
       },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
```

```
        ],
        "traits": {
          "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits":
{
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
          "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
            }
          },
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
          },
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>"
             }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the license configuration.</p>"
```

```
        }
      },
      "LicenseCountingType": {
        "target": "com.amazonaws.licensemanager#LicenseCountingType",
        "traits": {
          "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
        }
      },
      "LicenseRules": {
        "target": "com.amazonaws.licensemanager#StringList",
        "traits": {
          "smithy.api#documentation": "<p>License rules.</p>"
        }
      },
      "LicenseCount": {
        "target": "com.amazonaws.licensemanager#BoxLong",

       "traits": {
          "smithy.api#documentation": "<p>Number of available licenses.</p>"
        }
      },
      "LicenseCountHardLimit": {
        "target": "com.amazonaws.licensemanager#BoxBoolean",
        "traits": {
          "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
        }
      },
      "ConsumedLicenses": {
        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
          "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
        }
      },
      "Status": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>License configuration status.</p>"
        }

    },
      "OwnerAccountId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
        }
      },
      "ConsumedLicenseSummaryList": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
            }
        },
        "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
             "traits": {
                "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
            }
        },
        "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
                "smithy.api#documentation": "<p>Product information.</p>"
            }
        },
        "AutomatedDiscoveryInformation": {
            "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
            "traits": {
                "smithy.api#documentation": "<p>Automated discovery information.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicenseConversionTask": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
    },
```

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        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {

 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information
on.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
       },
      "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
            }
          },
          "ResourceArn": {
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            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
            }
          },
          "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information
 about the license type converted from.</p>"
            }
          },
          "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
              "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
          },

  "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
            }
          },
          "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
          },
          "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was
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completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

         },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
```

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    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
      "type": "structure",
      "members": {
        "LicenseManagerReportGeneratorArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
            "smithy.api#required":
{}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
      "type": "structure",
      "members": {
        "ReportGenerator": {
          "target": "com.amazonaws.licensemanager#ReportGenerator",
          "traits": {
            "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {

 "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License version.</p>"
          }
        }
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    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#GetLicenseResponse": {
    "type": "structure",
    "members": {
      "License": {
        "target": "com.amazonaws.licensemanager#License",
        "traits": {
          "smithy.api#documentation": "<p>License details.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },

"com.amazonaws.licensemanager#GetLicenseUsage": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {

"target": "com.amazonaws.licensemanager#ValidationException"
      }
```

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        ],
        "traits": {
          "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
        "type": "structure",
        "members": {
          "LicenseUsage": {
            "target":
"com.amazonaws.licensemanager#LicenseUsage",
            "traits": {
              "smithy.api#documentation": "<p>License usage details.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
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```
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n         and so on.</p>"

 }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n         cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
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                "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
              }

          },
            "LicenseManagerResourceShareArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n         provides member accounts with access to this share.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#Grant": {
          "type": "structure",
          "members": {
            "GrantArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
              }
            },
            "GrantName": {

 "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Grant name.</p>",
                "smithy.api#required": {}
              }
            },
            "ParentArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Parent ARN.</p>",
                "smithy.api#required": {}
              }
            },
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>License ARN.</p>",
                "smithy.api#required": {}
              }
            },
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        "GranteePrincipalArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {

"smithy.api#documentation": "<p>The grantee principal ARN.</p>",
            "smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the grant.</p>",
            "smithy.api#required": {}
          }
        },
        "GrantStatus": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>",
            "smithy.api#required": {}
          }
        },
        "StatusReason": {
          "target": "com.amazonaws.licensemanager#StatusReasonMessage",
          "traits": {
            "smithy.api#documentation": "<p>Grant status reason.</p>"
           }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>",
            "smithy.api#required": {}
          }
        },
        "GrantedOperations": {
          "target": "com.amazonaws.licensemanager#AllowedOperationList",
          "traits": {
            "smithy.api#documentation": "<p>Granted operations.</p>",
            "smithy.api#required": {}
          }
        },
        "Options": {
          "target": "com.amazonaws.licensemanager#Options",
          "traits": {
            "smithy.api#documentation": "<p>The options specified for the grant.</p>"
          }
        }
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        },
        "traits": {
          "smithy.api#documentation":
"<p>Describes a grant.</p>"
        }
      },
      "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Grant"
        }
      },
      "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
          "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
          },
          "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_ACCEPT"
            }
          },
          "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "REJECTED"

            }
          },
          "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ACTIVE"
            }
          },
          "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
          },
          "DELETED": {
            "target": "smithy.api#Unit",
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            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
          },
          "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_DELETE"
            }
          },
          "DISABLED": {
            "target": "smithy.api#Unit",
            "traits":
{
              "smithy.api#enumValue": "DISABLED"
            }
          },
          "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>"
            }

  },
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product name.</p>"
            }
          },
          "ProductSKU": {
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            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>Granted license issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>Granted license status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
```

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        },
        "LicenseMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
            "smithy.api#documentation": "<p>Granted license metadata.</p>"
          }
        },
        "CreateTime": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

  }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Version of the granted license.</p>"
          }
        },
        "ReceivedMetadata": {
          "target": "com.amazonaws.licensemanager#ReceivedMetadata",
          "traits": {
            "smithy.api#documentation": "<p>Granted license received metadata.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
      }
    },
    "com.amazonaws.licensemanager#GrantedLicenseList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#GrantedLicense"
      }
    },
    "com.amazonaws.licensemanager#ISO8601DateTime":
{
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
      }
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    },
    "com.amazonaws.licensemanager#Integer": {
      "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "InvalidParameterValueProvided",
          "httpResponseCode": 400
        },
        "smithy.api#documentation":
"<p>One or more parameter values are not valid.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "InvalidResourceState",
          "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n        <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
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            "smithy.api#documentation": "<p>Name of the filter.</p>",
            "smithy.api#required": {}
          }
        },
        "Condition": {
          "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
          "traits": {
            "smithy.api#documentation": "<p>Condition of the filter.</p>",
            "smithy.api#required": {}
          }
        },
        "Value": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Value of the filter.</p>"
          }
        }

},
    "traits": {
      "smithy.api#documentation": "<p>An inventory filter.</p>"
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
      "EQUALS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EQUALS"
        }
      },
      "NOT_EQUALS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "NOT_EQUALS"
        }
      },
      "BEGINS_WITH": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "BEGINS_WITH"
        }
      },
      "CONTAINS": {
        "target": "smithy.api#Unit",
        "traits": {
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                "smithy.api#enumValue": "CONTAINS"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
      },
      "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Issuer name.</p>",
              "smithy.api#required": {}
            }
          },
          "SignKey": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
      },
      "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Issuer name.</p>"
            }
          },
          "SignKey": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing
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```
algorithm.</p>"
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#License": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "LicenseName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {

               "smithy.api#documentation": "<p>License name.</p>"
                }
            },
            "ProductName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product name.</p>"
                }
            },
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>"
                }
            },
            "Issuer": {
                "target": "com.amazonaws.licensemanager#IssuerDetails",
                "traits": {
                    "smithy.api#documentation": "<p>License issuer.</p>"
                }
            },
```

```
            "HomeRegion": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {

            "smithy.api#documentation": "<p>Home Region of the license.</p>"
               }
            },
            "Status": {
               "target": "com.amazonaws.licensemanager#LicenseStatus",
               "traits": {
                  "smithy.api#documentation": "<p>License status.</p>"
               }
            },
            "Validity": {
               "target": "com.amazonaws.licensemanager#DatetimeRange",
               "traits": {
                  "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
               }
            },
            "Beneficiary": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>License beneficiary.</p>"
               }
            },
            "Entitlements": {

   "target": "com.amazonaws.licensemanager#EntitlementList",
               "traits": {
                  "smithy.api#documentation": "<p>License entitlements.</p>"
               }
            },
            "ConsumptionConfiguration": {
               "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
               "traits": {
                  "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
               }
            },
            "LicenseMetadata": {
               "target": "com.amazonaws.licensemanager#MetadataList",
               "traits": {
                  "smithy.api#documentation": "<p>License metadata.</p>"
               }
            },
            "CreateTime": {
               "target": "com.amazonaws.licensemanager#ISO8601DateTime",
               "traits": {
```

```
                "smithy.api#documentation": "<p>License
creation time.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConfiguration": {
    "type": "structure",
    "members": {
        "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
            }
        },
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
             }
        },
```

```
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>License rules.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                 "traits": {
                    "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the license configuration.</p>"
                }
            },
            "OwnerAccountId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

           }
            },
            "ConsumedLicenseSummaryList": {
                "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
```

```
            }
          },
          "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>Product information.</p>"
            }
          },
          "AutomatedDiscoveryInformation": {

            "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
            "traits": {
              "smithy.api#documentation": "<p>Automated discovery information.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
        "type": "structure",
        "members": {
          "ResourceArn":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Type of server resource.</p>"
            }
          },
          "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource consuming licenses.</p>"
            }
        },
        "AssociationTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
            }
        },
        "AmiAssociationScope": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
      }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
      }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
      "type": "enum",
      "members":
{
        "AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "AVAILABLE"
            }
        },
        "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        }
      }
    },
```

```
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
          }
        },
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits":
{
            "smithy.api#documentation": "<p>Type of resource.</p>"
          }
        },
        "ResourceStatus": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Status of the resource.</p>"
          }
        },
        "ResourceOwnerId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
          }
        },
        "AssociationTime": {
          "target": "com.amazonaws.licensemanager#DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
          }
        },

    "ConsumedLicenses": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license
configuration.</p>"
      }
    },
```

```
    "com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
      }
    },
    "com.amazonaws.licensemanager#LicenseConfigurations": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#LicenseConfiguration"
      }
    },
    "com.amazonaws.licensemanager#LicenseConversionContext": {

  "type": "structure",
      "members": {
        "UsageOperation": {
          "target": "com.amazonaws.licensemanager#UsageOperation",
          "traits": {
            "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you
are converting your resource from.  For more information about which platforms correspond to which usage
operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-
fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n        </p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
      }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
      "type": "structure",
      "members": {
        "LicenseConversionTaskId": {

   "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
          }
        },
        "ResourceArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n        conversion task.</p>"
          }
        },
        "SourceLicenseContext": {
```

```
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
            }
          },
          "DestinationLicenseContext": {
            "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the conversion task.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
          },
          "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
            }
          },
          "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
            }
          },
          "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
          }
        },
        "traits": {
```

```
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskId": {
        "type": "string",
        "traits": {

       "smithy.api#length": {
            "min": 0,
            "max": 50
        },
        "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
            "IN_PROGRESS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "IN_PROGRESS"
                }
            },
            "SUCCEEDED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "SUCCEEDED"
                }
            },
            "FAILED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
            "VCPU": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "vCPU"
            }
          },
          "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Instance"
            }
          },
          "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Core"
            }
          },
          "SOCKET": {
            "target": "smithy.api#Unit",
             "traits": {
              "smithy.api#enumValue": "Socket"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseDeletionStatus": {
        "type": "enum",
        "members": {
          "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_DELETE"
            }
          },
          "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#License"
        }
      },
```

```
    "com.amazonaws.licensemanager#LicenseOperationFailure": {

      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
          }
        },
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Resource type.</p>"
          }
        },
        "ErrorMessage": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Error message.</p>"
          }
        },
        "FailureTime": {
          "target": "com.amazonaws.licensemanager#DateTime",
          "traits": {

    "smithy.api#documentation": "<p>Failure time.</p>"
          }
        },
        "OperationName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the operation.</p>"
          }
        },
        "ResourceOwnerId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
          }
        },
        "OperationRequestedBy": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
          }
        },
```

```
            "MetadataList": {

                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Reserved.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailureList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecification": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

                  "smithy.api#required": {}
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecifications": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseSpecification"
        }
    },
```

```
"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {
            "target": "smithy.api#Unit",

        "traits": {
                "smithy.api#enumValue": "AVAILABLE"
            }
        },
        "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
        },
        "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
            }
        },
        "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

     "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
```

```
    },
    "com.amazonaws.licensemanager#LicenseUsage": {
      "type": "structure",
      "members": {
        "EntitlementUsages": {
          "target": "com.amazonaws.licensemanager#EntitlementUsageList",
          "traits": {
            "smithy.api#documentation": "<p>License entitlement usages.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

      }
    },
    "com.amazonaws.licensemanager#LicenseUsageException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "LicenseUsageFailure",
          "httpResponseCode": 412
        },
        "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 412
      }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
      },
      "output": {

   "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
```

```
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n        <p>Resource associations need not consume licenses from a license
configuration. \n        For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results
 to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
          "LicenseConfigurationAssociations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
            "traits": {
              "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
            }
          },
          "NextToken": {

 "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListDistributedGrants": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
```

```
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
          "type": "structure",
          "members": {
            "GrantArns": {
              "target": "com.amazonaws.licensemanager#ArnList",
              "traits": {

            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n
  <li>\n            <p>\n              <code>GranteePrincipalARN</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>LicenseIssuerName</code>\n
        </p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",

      "traits": {
                "smithy.api#documentation": "<p>Distributed grant details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
        },
        "errors": [
          {

    "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
            "LicenseOperationFailureList": {
                "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
                "traits": {
                    "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

   "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
```

```
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#Filters",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
          "type": "structure",
          "members": {
            "LicenseConfigurations": {
              "target": "com.amazonaws.licensemanager#LicenseConfigurations",
              "traits": {
                "smithy.api#documentation": "<p>Information about the license configurations.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
```

```
      "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
    "type": "structure",
    "members": {
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      },
      "MaxResults": {
```

```
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {

    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>\n         Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTasks": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
 {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n          <li>\n            <p>\n              <code>LicenseConfigurationArn</code>\n
</p>\n          </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
```

```
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits":
{
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
          "type": "structure",
          "members": {
            "ReportGenerators": {
              "target": "com.amazonaws.licensemanager#ReportGeneratorList",
              "traits": {
                "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }

          }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
         }
      },
      "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
         "type": "structure",
         "members": {
            "ResourceArn": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                  "smithy.api#required": {}
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanager#BoxInteger",
               "traits": {

          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
               }
            },
            "NextToken": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
         "type": "structure",
         "members": {
            "LicenseSpecifications": {
```

```
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
                "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersions": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
```

```
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
               "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
          "type": "structure",
          "members": {
            "Licenses": {
              "target": "com.amazonaws.licensemanager#LicenseList",
              "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
              }
            },

    "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#ListLicenses": {
          "type": "operation",
          "input": {
```

```
            "target": "com.amazonaws.licensemanager#ListLicensesRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#ListLicensesResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListLicensesRequest": {
          "type": "structure",
          "members": {
            "LicenseArns": {
              "target": "com.amazonaws.licensemanager#ArnList",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
              }
            },

         "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n
    <li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>Status</code>\n            </p>\n          </li>\n        </ul>"
              }
```

```
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token
for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
      "type": "structure",
      "members": {
        "Licenses": {
          "target": "com.amazonaws.licensemanager#LicenseList",
          "traits": {
            "smithy.api#documentation": "<p>License details.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {

  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrants": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
      },
```

```
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while specifying the\n          recipient as this Amazon Web Services account, your organization, or an organizational unit\n          (OU) to which this member account belongs.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n            <p>\n                <code>ParentArn</code>\n            </p>\n        </li>\n
<li>\n            <p>\n                <code>GranteePrincipalArn</code>\n            </p>\n        </li>\n    </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
```

```
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
              "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
          "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
             "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>LicenseIssuerName</code>\n            </p>\n
</li>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n          <li>\n
<p>\n
        <code>GranterAccountId</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
              "smithy.api#documentation": "<p>Received grant details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists received licenses.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
```

```
            },
            {

        "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>Beneficiary</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                    <code>ProductSKU</code>\n
            </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#GrantedLicenseList",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
        "type": "structure",
        "members": {
          "LicenseArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
            }
          },

          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>Status</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>IssuerName</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Beneficiary</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
```

```
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
    "type": "structure",
    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#GrantedLicenseList",
        "traits": {
          "smithy.api#documentation": "<p>Received license details.</p>"
        }
      },

     "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FailedDependencyException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
```

```
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#InventoryFilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n are supported:</p>\n <ul>\n <li>\n <p>\n <code>account_id</code>
- The ID of the Amazon Web Services account that owns the resource.\n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
 </li>\n <li>\n <p>\n <code>application_name</code> - The name of the
application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n
 </li>\n <li>\n <p>\n <code>license_included</code> - The type of license included. \n
 Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values
are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-
server-web</code> | \n <code>windows-server-datacenter</code>.</p>\n </li>\n <li>\n
 <p>\n <code>platform</code> - The platform of the resource.\n Logical operators are
<code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n </li>\n <li>\n <p>\n
 <code>resource_id</code> - The ID of the resource. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n
 <code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical
operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> |
<code>NOT_EQUALS</code> (cross account).</p>\n </li>\n </ul>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
        "type": "structure",
        "members": {
          "ResourceInventoryList": {
            "target": "com.amazonaws.licensemanager#ResourceInventoryList",
            "traits": {
              "smithy.api#documentation": "<p>Information
about the resources.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the tags.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
```

```
        "errors":
[
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
         }
      },
      "com.amazonaws.licensemanager#ListTokensRequest": {
         "type": "structure",
         "members": {
            "TokenIds": {
               "target": "com.amazonaws.licensemanager#StringList",
               "traits": {

                  "smithy.api#documentation": "<p>Token IDs.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanager#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
      <ul>\n          <li>\n          <p>\n          <code>LicenseArns</code>\n          </p>\n          </li>\n
</ul>"
               }
            },
            "NextToken": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanager#MaxSize100",
```

```
            "traits": {
              "smithy.api#documentation":
"<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListTokensResponse": {
        "type": "structure",
        "members": {
          "Tokens": {
            "target": "com.amazonaws.licensemanager#TokenList",
            "traits": {
              "smithy.api#documentation": "<p>Received token details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
             {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n consumption details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration.</p>"
         }
      },
      "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
         "type": "structure",
         "members": {
            "LicenseConfigurationArn": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                  "smithy.api#required": {}
               }
            },
             "MaxResults": {
               "target": "com.amazonaws.licensemanager#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
               }
            },
            "NextToken": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanager#Filters",
               "traits": {
                  "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n are supported:</p>\n <ul>\n <li>\n <p>\n <code>resourceArn</code> - The ARN of the license configuration resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n <code>resourceType</code> - The resource type
```

(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n
<code>resourceAccount</code> - The ID of the account that owns the resource. \n Logical operators
are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
"type": "structure",
"members": {

"LicenseConfigurationUsageList": {
"target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
"traits": {
"smithy.api#documentation": " Information about the license configurations. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#Location": {
"type": "string"
},
"com.amazonaws.licensemanager#Long": {
"type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
"type": "structure",
"members": {
"ResourceType":
{
"target": "com.amazonaws.licensemanager#ResourceType",
"traits": {
"smithy.api#documentation": " Type of resource associated with a license. "
}

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        },
        "AssociationCount": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
      }
    },
    "com.amazonaws.licensemanager#ManagedResourceSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
      }
    },
    "com.amazonaws.licensemanager#MaxSize100": {

    "type": "integer",
      "traits": {
        "smithy.api#range": {
          "min": 1,
          "max": 100
        }
      }
    },
    "com.amazonaws.licensemanager#MaxSize3StringList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 3
        }
      }
    },
    "com.amazonaws.licensemanager#Message": {
      "type": "string"
    },
    "com.amazonaws.licensemanager#Metadata": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

    "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The value.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
    }
},
"com.amazonaws.licensemanager#MetadataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Metadata"
    }
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement maximum count is reached.</p>",
         "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#Options": {
    "type": "structure",
    "members": {
        "ActivationOverrideBehavior": {
            "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
            "traits": {
                "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter.</p>\n <ul>\n <li>\n <p>As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n
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</li>\n <li>\n <p>As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization.</p>\n </li>\n <li>\n <p>As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant.</p>\n </li>\n </ul>\n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n <p>Use this value to activate a grant without replacing any member accounts\n active grants for the same product.</p>\n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n <p>Use this value to activate a grant and disable other active grants in any\n member accounts
 for the same product. This action will also replace their\n previously activated grants with this activated grant.</p>\n </dd>\n </dl>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#OrganizationConfiguration": {
        "type": "structure",
        "members": {
            "EnableIntegration": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation":
 "<p>Enables Organizations integration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
    },
    "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 1
            }
```

```
        }
      },
      "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductInformationFilterList": {
            "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
            "traits": {
              "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n          <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n          <p>The following filters and are supported when
the resource type \n          is <code>SSM_MANAGED</code>:</p>\n
          <ul>\n            <li>\n              <p>\n                <code>Application Name</code> - The name of the
application.\n              Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>Application Publisher</code> - The publisher of the application.\n              Logical
operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n              <p>\n
<code>Application Version</code> - The version of the application.\n              Logical operator is
<code>EQUALS</code>.</p>\n            </li>\n            <li>\n              <p>\n                <code>Platform
Name</code> - The name of the platform.\n              Logical operator is <code>EQUALS</code>.</p>\n
</li>\n            <li>\n              <p>\n                <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
          </li>\n            <li>\n              <p>\n                <code>Tag:key</code> - The key of a tag attached to an
Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>.  The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key.\n              </p>\n            </li>\n            <li>\n              <p>\n
<code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from
automated discovery.\n              Logical operator is <code>NOT_EQUALS</code>.</p>\n            </li>\n
<li>\n              <p>\n                <code>License Included</code> - The type of license included.\n              Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n              Possible values are:
 <code>sql-server-enterprise</code> | \n              <code>sql-server-standard</code> | \n              <code>sql-server-
web</code> |  \n              <code>windows-server-datacenter</code>.</p>\n            </li>\n          </ul>\n
<p>The following filters and logical operators are supported when the resource type\n          is
<code>RDS</code>:</p>\n          <ul>\n            <li>\n              <p>\n                <code>Engine Edition</code> -
The edition of the database engine.\n              Logical operator is <code>EQUALS</code>.\n              Possible
values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code>.</p>\n            </li>\n            <li>\n              <p>\n                <code>License Pack</code> - The license
```

```
pack.\n            Logical operator is <code>EQUALS</code>.\n            Possible values are: <code>data
guard</code> | \n            <code>diagnostic pack sqlt</code> | \n
          <code>tuning pack sqlt</code> | \n            <code>ols</code> | \n            <code>olap</code>.</p>\n
    </li>\n        </ul>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
          }
        },
        "com.amazonaws.licensemanager#ProductInformationFilter": {
          "type": "structure",
          "members": {
            "ProductInformationFilterName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Filter name.</p>",
                "smithy.api#required": {}
              }
            },
            "ProductInformationFilterValue": {
              "target": "com.amazonaws.licensemanager#StringList",

           "traits": {
                "smithy.api#documentation": "<p>Filter value.</p>"
              }
            },
            "ProductInformationFilterComparator": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Logical operator.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes product information filters.</p>"
          }
        },
        "com.amazonaws.licensemanager#ProductInformationFilterList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#ProductInformationFilter"
          }
        },
        "com.amazonaws.licensemanager#ProductInformationList": {
```

```
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
      }
    },
    "com.amazonaws.licensemanager#ProvisionalConfiguration": {
      "type": "structure",
      "members": {
        "MaxTimeToLiveInMinutes": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
      }
    },
    "com.amazonaws.licensemanager#RateLimitExceededException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "RateLimitExceeded",
          "httpResponseCode": 429
        },
        "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 429
      }
    },
    "com.amazonaws.licensemanager#ReceivedMetadata": {
      "type": "structure",
      "members": {
        "ReceivedStatus": {
          "target": "com.amazonaws.licensemanager#ReceivedStatus",
          "traits": {
            "smithy.api#documentation": "<p>Received status.</p>"
          }
        },
        "ReceivedStatusReason": {
```

```
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Received
status reason.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReceivedStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue":
"PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"
                }
            },
            "ACTIVE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "ACTIVE"
                }
            },
            "FAILED_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
```

```
            "smithy.api#enumValue": "FAILED_WORKFLOW"
          }
        },
        "DELETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DELETED"
          }
        },
        "DISABLED": {
          "target": "smithy.api#Unit",
           "traits": {
            "smithy.api#enumValue": "DISABLED"
          }
        },
        "WORKFLOW_COMPLETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "WORKFLOW_COMPLETED"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#RedirectException": {
      "type": "structure",
      "members": {
        "Location": {
          "target": "com.amazonaws.licensemanager#Location",
          "traits": {
            "smithy.api#httpHeader": "Location"
          }
        },
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
         "smithy.api#error": "client",
        "smithy.api#httpError": 308
      }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
      },
      "output": {
```

```
            "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

  }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
```

```
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#RenewType":
{
      "type": "enum",
      "members": {
        "NONE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "None"
          }
        },
        "WEEKLY": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Weekly"
          }
        },
        "MONTHLY": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Monthly"
          }
        }
      }
    },
```

```
    "com.amazonaws.licensemanager#ReportContext": {
      "type": "structure",
      "members": {
        "licenseConfigurationArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {

      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this
generator reports on.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
      }
    },
    "com.amazonaws.licensemanager#ReportFrequency": {
      "type": "structure",
      "members": {
        "value": {
          "target": "com.amazonaws.licensemanager#Integer",
          "traits": {
            "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated.  \n         The only supported value is <code>1</code>.</p>"
          }
        },
        "period": {
          "target": "com.amazonaws.licensemanager#ReportFrequencyType",

          "traits": {
            "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
or monthly.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
      }
    },
    "com.amazonaws.licensemanager#ReportFrequencyType": {
      "type": "enum",
      "members": {
        "DAY": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DAY"
          }
```

```
            },
            "WEEK": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "WEEK"
               }
            },
            "MONTH": {
               "target": "smithy.api#Unit",
               "traits":
{
                  "smithy.api#enumValue": "MONTH"
               }
            }
         }
      },
      "com.amazonaws.licensemanager#ReportGenerator": {
         "type": "structure",
         "members": {
            "ReportGeneratorName": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Name of the report generator.</p>"
               }
            },
            "ReportType": {
               "target": "com.amazonaws.licensemanager#ReportTypeList",
               "traits": {
                  "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
               }
            },
            "ReportContext": {
               "target": "com.amazonaws.licensemanager#ReportContext",
               "traits": {
                  "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
               }
            },
            "ReportFrequency": {
               "target": "com.amazonaws.licensemanager#ReportFrequency",
               "traits": {
                  "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
               }
            },
            "LicenseManagerReportGeneratorArn": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
```

```
            }
          },
          "LastRunStatus": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
            }
          },
          "LastRunFailureReason":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
            }
          },
          "LastReportGenerationTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
            }
          },
          "ReportCreatorAccount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",

      "traits": {
              "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
          },
          "S3Location": {
            "target": "com.amazonaws.licensemanager#S3Location",
            "traits": {
              "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
            }
          },
          "CreateTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Time the report was created.</p>"
            }
          },
```

```
        "Tags": {
          "target": "com.amazonaws.licensemanager#TagList",
          "traits": {
            "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
          }

}
    },
    "traits": {
      "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
    }
  },
  "com.amazonaws.licensemanager#ReportGeneratorList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ReportGenerator"
    }
  },
  "com.amazonaws.licensemanager#ReportGeneratorName": {
    "type": "string",
    "traits": {
      "smithy.api#length": {
        "min": 1,
        "max": 100
      }
    }
  },
  "com.amazonaws.licensemanager#ReportType": {
    "type": "enum",
    "members": {
      "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
        }

  },
        "LICENSE_CONFIGURATION_USAGE_REPORT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "LicenseConfigurationUsageReport"
          }
        }
    }
  },
  "com.amazonaws.licensemanager#ReportTypeList": {
    "type": "list",
    "member": {
```

```
            "target": "com.amazonaws.licensemanager#ReportType"
          }
        },
        "com.amazonaws.licensemanager#ResourceInventory": {
          "type": "structure",
          "members": {
            "ResourceId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>ID of the resource.</p>"
              }
            },
            "ResourceType": {
              "target": "com.amazonaws.licensemanager#ResourceType",
              "traits":
{
                "smithy.api#documentation": "<p>Type of resource.</p>"
              }
            },
            "ResourceArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
              }
            },
            "Platform": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Platform of the resource.</p>"
              }
            },
            "PlatformVersion": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
              }
            },
            "ResourceOwningAccountId":
{
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
          }
```

```
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#ResourceInventory"
    }
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

         "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
        "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
```

```
                "smithy.api#enumValue": "EC2_INSTANCE"
              }
            },
            "EC2_HOST": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "EC2_HOST"
              }
            },
            "EC2_AMI": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "EC2_AMI"
              }
            },
            "RDS": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "RDS"
              }
            },
            "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
              "target": "smithy.api#Unit",
              "traits": {
                 "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#S3Location": {
          "type": "structure",
          "members": {
            "bucket": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
              }
            },
            "keyPrefix": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanager#ServerInternalException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "InternalError",
            "httpResponseCode": 500
          },
          "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
          "smithy.api#error": "server",
          "smithy.api#httpError": 500
        }
      },
      "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 4096
          }
        }
      },
      "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits":
{
          "smithy.api#length": {
            "min": 0,
            "max": 400
          },
          "smithy.api#pattern": "^[\\s\\S]+$"
        }
      },
      "com.amazonaws.licensemanager#String": {
        "type": "string"
      },
      "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#Tag": {
```

```
        "type": "structure",
        "members": {
          "Key": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Tag key.</p>"
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Tag value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Tag"
        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
          {
            "target":
"com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
```

```
            "TokenId": {
              "target": "com.amazonaws.licensemanager#String",
               "traits": {
                 "smithy.api#documentation": "<p>Token ID.</p>"
              }
            },
            "TokenType": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                 "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
              }
            },
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                 "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
              }
            },
            "ExpirationTime": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                 "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
 format.</p>"
              }
            },
            "TokenProperties": {
              "target": "com.amazonaws.licensemanager#MaxSize3StringList",
              "traits": {
                 "smithy.api#documentation": "<p>Data specified by the caller.</p>"
              }
            },
            "RoleArns": {
              "target": "com.amazonaws.licensemanager#ArnList",
              "traits": {
                 "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                 "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
              }
            }
          },
          "traits": {
```

```
            "smithy.api#documentation": "<p>Describes a token.</p>"
        }
    },
    "com.amazonaws.licensemanager#TokenList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#TokenData"
        }
    },
    "com.amazonaws.licensemanager#TokenString": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 4096
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#TokenType": {
        "type": "enum",
        "members": {
            "REFRESH_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REFRESH_TOKEN"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                     "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanager#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
        },
        "output": {

"target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
         }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseConfigurationStatus": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
            "traits": {
                "smithy.api#documentation": "<p>New status of the license configuration.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {

 "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
 configuration is licenseAffinityToHost.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New name
 of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New description of the license configuration.</p>"
            }
        },
        "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
```

```
            "traits": {
                "smithy.api#documentation": "<p>New product information.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        }
    },
    "traits":
{
        "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
    "type": "structure",
    "members": {},
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
       },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
```

```
            {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n          <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
          "type": "structure",
          "members": {
            "LicenseManagerReportGeneratorArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                "smithy.api#required": {}
              }
            },
            "ReportGeneratorName": {
              "target": "com.amazonaws.licensemanager#ReportGeneratorName",
              "traits": {
                "smithy.api#documentation": "<p>Name of the report generator.</p>",
                "smithy.api#required": {}
              }
            },
            "Type": {
              "target": "com.amazonaws.licensemanager#ReportTypeList",
              "traits": {
                "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n          <ul>\n            <li>\n              <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n              <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n          </ul>",
                "smithy.api#required": {}
              }
            },
            "ReportContext": {
              "target": "com.amazonaws.licensemanager#ReportContext",
              "traits": {
```

```
                "smithy.api#documentation": "<p>The report context.</p>",
                "smithy.api#required": {}
              }
            },
            "ReportFrequency": {
              "target": "com.amazonaws.licensemanager#ReportFrequency",
              "traits":
{
                "smithy.api#documentation": "<p>Frequency by which reports are generated.</p>",
                "smithy.api#required": {}
              }
            },
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientRequestToken",
              "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            },
            "Description": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
          },
          "errors": [
```

```
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
              "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
              "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n          <p>You can update the license specifications of AMIs, instances, and
hosts.\n          You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
          }
        },

        "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                "smithy.api#required": {}
              }
            },
            "AddLicenseSpecifications": {
              "target": "com.amazonaws.licensemanager#LicenseSpecifications",
              "traits": {
                "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
              }
            },
```

```
        "RemoveLicenseSpecifications": {
          "target": "com.amazonaws.licensemanager#LicenseSpecifications",
          "traits": {
            "smithy.api#documentation":
"<p>ARNs of the license configurations to remove.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
      }
    },
```

```
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
      "type": "structure",
      "members": {
        "S3BucketArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License
 Manager information is stored.</p>"
          }
        },
        "SnsTopicArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
          }
        },
        "OrganizationConfiguration": {
          "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
          }
        },
        "EnableCrossAccountsDiscovery": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"

    }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#UsageOperation": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
```

```
                "min": 0,
                "max": 50
            }
        }
      },
      "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

       "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      }
    }
}
CheckoutLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
```

ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.120 clientmodel 0.6.2

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1.121 prometheus-client-model 0.6.2

1.121.1 Available under license :

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1.122 aws-sdk-go-v2-service-dynamodbstreams 1.25.3

1.122.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
```

```
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
```

```
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }} ${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
      uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
```

spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity

```
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {
```

```
// License beneficiary.
//
// This member is required.
Beneficiary *string

// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string
```

```
 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if
```

```
err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err
= addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
```

```
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}
```

```
type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
```

```
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
```

```
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
```

```
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {
```

```
 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
```

```
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
```

```
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
  }
 }
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
```

CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger

```
 OperationInputValidation
 spanInitializeEnd
Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 Retry
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
```

```
err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
```

```
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
```

AWS SDK for Go

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AssociateLicense

- Initialize stack step
  - spanInitializeStart
  - RegisterServiceMetadata
  - legacyEndpointContextSetter
  - SetLogger
  - OperationInputValidation
  - spanInitializeEnd
- Serialize stack step
  - spanBuildRequestStart
  - setOperationInput
  - ResolveEndpoint
  - OperationSerializer
- Build stack step
  - ClientRequestID
  - ComputeContentLength
  - SetCredentialSourceMiddleware
  - UserAgent
  - AddTimeOffsetMiddleware
  - RecursionDetection
  - spanBuildRequestEnd
- Finalize stack step
  - spanRetryLoop
  - Retry
  - RetryMetricsHeader
  - ResolveAuthScheme
  - GetIdentity
  - ResolveEndpointV2
  - disableHTTPS
  - ComputePayloadHash
  - setLegacyContextSigningOptions

```
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
```

```
// This member is required.
ClientToken *string

// Digital signature method. The possible value is JSON Web Signature (JWS)
// algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
//
// [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
//
// This member is required.
DigitalSignatureMethod types.DigitalSignatureMethod

// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string
```

```
// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
     "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
        "type": "integer"
     },
     "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
        "type": "long"
     },
     "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
        "type": "operation",
        "input": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },

        {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own
License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/DeregisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
          "type": "structure",
          "members": {
            "SubscriptionProviderArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
               "traits": {
                 "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider
resource to deregister.</p>",
                 "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
```

```
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of name to filter by.</p>"
             }
          },
          "Values": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
            }
          },
          "Operator": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
            "traits": {
              "smithy.api#documentation": "<p>An operator for filtering results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetRegisteredSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

          "traits": {
                "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource specified \n\t\t\tin the request.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
                 }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
```

```
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/GetServiceSettings"

           },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
          "type": "structure",
          "members": {}
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
          "type": "structure",
          "members": {
            "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
              }
```

```
            },
            "Status": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
               }
            },
            "StatusMessage": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
               "traits": {
                  "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
               }
            },
            "HomeRegions": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                  "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
               }
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
         "type": "structure",
         "members": {
            "AmiId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
               }
            },
            "InstanceID": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
               }
            },
            "InstanceType": {
               "target": "smithy.api#String",
               "traits":
{
                  "smithy.api#documentation": "<p>The instance type of the resource.</p>"
               }
            },
            "AccountID": {
               "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
        },
        "Region": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
        },
        "UsageOperation": {
            "target": "smithy.api#String",

  "traits": {
                "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
        },
        "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
        },
        "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
        },
        "OsVersion": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The operating system software version that runs on your
instance.</p>"
            }
          },
          "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
          },
          "SubscriptionProviderUpdateTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
            }
          },
          "DualSubscription": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
            }
          },
          "RegisteredWithSubscriptionProvider": {
            "target": "smithy.api#String",
            "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
```

```
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
          "smithy.api#error": "server"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
           },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
```

```
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager Linux Subscriptions",
           "arnNamespace": "license-manager-linux-subscriptions",
          "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
               "type": "Boolean"
            },
            "UseFIPS": {
```

```
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
        },
        "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
        }
    },
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }

    ],
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                    "type": "error"
                },
                {
                    "conditions": [],
                    "rules": [
                        {
                            "conditions": [
```

```
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true
                                    ]

}
                            ],
                            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                            "type": "error"
                        },
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": {
                                    "ref": "Endpoint"
                                },
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"

                }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "isSet",
                                "argv": [
                                    {
                                        "ref": "Region"
                                    }
                                ]
                            }
                        ],
                        "rules": [
                            {
```

```
                "conditions": [
                    {

            "fn": "aws.partition",
                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ],
                        "assign": "PartitionResult"
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {

                              "ref": "UseFIPS"
                                    },
                                    true
                                ]
                            },
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]
                            }

],
                        "rules": [
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            true,
                                            {
                                                "fn": "getAttr",
                                                "argv": [
                                                    {
                                                        "ref": "PartitionResult"
```

```
                },
                                "supportsFIPS"
                            ]
                        }
                    ]
                },
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [

                             {
                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [],

    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],

             "type": "tree"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
```

```
                "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                "type": "error"
              }
            ],
            "type": "tree"
          },
          {

      "conditions": [
            {
              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseFIPS"
                },
                true
              ]
            }
          ],
          "rules": [
            {
              "conditions": [
                {

          "fn": "booleanEquals",
                  "argv": [
                    {
                      "fn": "getAttr",
                      "argv": [
                        {
                          "ref": "PartitionResult"
                        },
                        "supportsFIPS"
                      ]
                    },
                    true

                ]
                }
              ],
              "rules": [
                {
                  "conditions": [],
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {
```

```
                                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
                                ],
                                "type": "tree"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "FIPS is enabled
 but this partition does not support FIPS",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true

        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
```

```
                                        "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [

        {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"

                }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},
                            "headers": {}
```

```
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
                ],
                "type": "tree"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "error": "Invalid Configuration: Missing Region",
        "type": "error"
    }
],
"type": "tree"
}
]
},
"smithy.rules#endpointTests": {
"testCases": [
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
"UseDualStack": true
}
},
{
"documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
"expect": {
"endpoint": {
"url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
}
},
"params": {
"Region": "us-east-1",
"UseFIPS": true,
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```
            "UseDualStack": false
          }
        },
        {

      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
            }

    },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
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"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
                      }
                    },
                    "params": {
                      "Region": "cn-north-1",
                      "UseFIPS": true,
                      "UseDualStack": false
                    }
                  },
                  {
                    "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                      }
                     },
                    "params": {
                      "Region": "cn-north-1",
                      "UseFIPS": false,
                      "UseDualStack": true
                    }
                  },
                  {
                    "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
                      }
                    },
                    "params": {
                      "Region": "cn-north-1",
                      "UseFIPS": false,
                      "UseDualStack": false
                    }
                  },
                  {

 "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
                      }
                    },
                    "params": {
                      "Region": "us-gov-east-1",
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            "UseFIPS": true,
            "UseDualStack": true
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }

     },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
        }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
            }
        },
        "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
        }
    },
    {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
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            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {

        "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS":
false,
            "UseDualStack": false
          }
        },
```

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{
  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
  "expect": {
    "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": true,
    "UseDualStack": true
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
     }
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": true,
    "UseDualStack": false
  }
},
{
  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
  "expect": {
    "error": "DualStack is enabled but this partition does not support DualStack"
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": false,
    "UseDualStack": true
  }
},
{

 "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
  "expect": {
    "endpoint": {
      "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
    }
  },
  "params": {
    "Region": "us-isob-east-1",
    "UseFIPS": false,
    "UseDualStack": false
  }
```

```
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }

  },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {

      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
      },
```

```
                "params": {

 "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "Missing region",
                "expect": {
                  "error": "Invalid Configuration: Missing Region"
                }
              }
            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled LinuxSubscriptionsDiscovery"

       },
            {
              "name": "Disabled",
              "value": "Disabled",
              "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
        "type": "structure",
        "members": {
          "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
```

```
            "OrganizationIntegration": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
               "traits": {
                  "smithy.api#documentation":
"<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

  {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "Instances"
            }
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
{
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n        <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n        <ul>\n          <li>\n
  <p>\n              <code>AccountID</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
    <code>AmiID</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>DualSubscription</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>InstanceID</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>InstanceType</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>ProductCode</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Region</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Status</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>UsageOperation</code>\n            </p>\n          </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code>
 values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n          <li>\n            <p>\n
<code>contains</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>equals</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to
 start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
```

```
        "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
            "Instances": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
                "traits": {
                    "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
                }
            },
            "NextToken": {

     "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
```

```
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",

   "items": "Subscriptions"
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
         "type": "structure",
         "members": {
            "Filters": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n         <p>The valid names for this filter are:</p>\n         <ul>\n
<li>\n               <p>\n                  <code>Subscription</code>\n               </p>\n            </li>\n         </ul>\n
<p>The
 valid Operators for this filter are:</p>\n         <ul>\n            <li>\n               <p>\n
<code>contains</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>equals</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>Notequal</code>\n               </p>\n            </li>\n         </ul>"
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                     "min": 1,
                     "max": 16384
                  }
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
          "Subscriptions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
```

```
        ],
        "traits": {
          "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSources": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
          "traits": {
            "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to return \n\t\t\tin the list.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
            "smithy.api#range": {
              "min": 1,
              "max": 100
            }
          }

  },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the nextToken from a previously truncated response.</p>"
          }
        }
      },
```

```
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
            "RegisteredSubscriptionProviders": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
                "traits": {
                    "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request.</p>"
                }
            },

            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {

            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
         }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
```

```
                "documentation": "Equal operator"
              },
              {
                "name": "NOT_EQUAL",
                "value": "NotEqual",
                "documentation": "Not equal operator"
              },
              {
                "name": "CONTAINS",
                "value": "Contains",
                "documentation": "Contains operator"
              }
            ],
            "smithy.api#length": {
              "min": 1,
              "max": 20
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled OrganizationIntegration"
              },
              {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
          "type": "list",
          "member": {
            "target": "smithy.api#String"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
```

```
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/RegisterSubscriptionProvider"

          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
              "smithy.api#required": {}
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the
 Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation":
 "<p>The Linux subscription provider that you registered.</p>"
            }
          },
          "SubscriptionProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
 {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
```

```
            }
        },
        "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
                "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
            }
        },
        "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
             "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
            }
        },
        "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
                "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
            }
        },
        "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits":
{
                "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
            }
        },
        "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
```

```
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

    }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
                {
                    "name": "Successful",
                    "value": "Successful",
                    "documentation": "Successful status"
                },
                {
                    "name": "Failed",
                    "value": "Failed",
```

```
                "documentation": "Failed status"
              }
            ]
          }
        },

      "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#length": {
              "min": 1,
              "max": 100
            }
          }
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          },
          "smithy.api#uniqueItems": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
          "Name":
{
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
          },
          "Type": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
```

```
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [

 {
                    "name": "RedHat",
                    "value": "RedHat",
                    "documentation": "RedHat subscription provider namespace"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
```

```
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "ACTIVE",
          "value": "ACTIVE",
          "documentation": "ACTIVE status"
        },
        {
          "name": "INVALID",
          "value": "INVALID",

"documentation": "INVALID status"
        },
        {
          "name": "PENDING",
          "value": "PENDING",
          "documentation": "PENDING status"
        }
      ]
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
    "type": "list",
    "member": {
      "target": "smithy.api#String"
    },
    "traits": {
      "smithy.api#length": {
        "min": 0,
        "max": 50
      },
      "smithy.api#sensitive": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
     },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
               "method": "PUT",
               "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
         "type": "structure",
         "members":
 {
            "resourceArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                  "smithy.api#httpLabel": {},
                  "smithy.api#required": {}
               }
            },
            "tags": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
               "traits": {
                  "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }

      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
         "type": "structure",
         "members": {},
```

```
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
      "type": "map",
      "key": {
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation":
"<p>The request was denied due to request throttling.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        }
```

```
        ],
        "traits": {
          "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
           "smithy.api#http": {
            "method": "DELETE",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tagKeys": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
            "traits": {

           "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
              "smithy.api#httpQuery": "tagKeys",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

        },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
          "type": "structure",
          "members": {
            "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required": {}
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The
settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated
from.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowUpdate": {
              "target":
```

```
 "smithy.api#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home Region.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                 "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
                }

        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated data for Linux\n      subscriptions.</p>"
                }
            }
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
          "smithy.api#error": "client"
        }
      }
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
```

```
err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
```

```
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
```

```
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
```

```
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
}
```

```
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
```

SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput

ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
```

```
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 2
                    }
                }
            },
            "DomainCredentialsProvider": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
                }
            },
            "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "SELF_MANAGED",
              "value": "SELF_MANAGED",
              "documentation": "SELF_MANAGED type of Active Directory"
            },
            {
              "name": "AWS_MANAGED",
              "value": "AWS_MANAGED",
              "documentation": "AWS_MANAGED type of Active Directory"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n         <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http":
 {
               "code": 200,
               "method": "POST",
               "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
                  "smithy.api#required": {}
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
```

```
                "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                "smithy.api#required": {}
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
              }
            }
          },
          "traits": {

        "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
          "type": "integer"
        },
        "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
             }
          },
```

```
        "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

        {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
             },
            "smithy.api#idempotent": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
      "type": "structure",
      "members": {
        "IdentityProviderArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseServerSettings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for
the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
            "smithy.api#required": {}
          }
        },
        "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
      "type": "structure",
      "members": {
        "IdentityProviderArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
          }
        },
        "LicenseServerEndpointArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
```

```
                "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/DeregisterIdentityProvider"
```

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
```

```
        "traits": {
            "smithy.api#output": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
```

```
            "uri": "/user/DisassociateUser"
          },
          "smithy.api#idempotent": {}

      }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
            }
          },
          "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
      "type": "structure",
      "members": {
        "InstanceUserSummary":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
      "type": "structure",
      "members": {
        "Subnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
            "smithy.api#length": {
              "min": 1
            },

  "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
      "type": "structure",
      "members": {
        "Attribute": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
          }
        },
        "Operation": {
          "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
            }
        },
        "Value": {
            "target": "smithy.api#String",
            "traits":
{
                "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#FilterList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
    "type": "union",
    "members": {
        "ActiveDirectoryIdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
             "traits": {
                "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
    "type": "structure",
    "members": {
        "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
                "smithy.api#required": {}
```

```
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
            }
          },
          "FailureMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
        "type": "list",
        "member": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
          "type": "structure",
          "members": {
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "Status": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                "smithy.api#required": {}
              }
            },
            "Products": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
               "traits": {
                "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                "smithy.api#required": {}
              }
            },
            "LastStatusCheckDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The date of the last status check.</p>"
              }
            },
            "StatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
          "type": "list",
```

```
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },

    "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
                 }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
```

```
                "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
              }
            },
            "AssociationDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
              }
            },
            "DisassociationDate": {
              "target": "smithy.api#String",
               "traits": {
                "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
             "smithy.api#error": "server",
            "smithy.api#httpError": 500
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
```

```
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
```

```
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

       "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
```

```
            "additionalExposedHeaders": [
              "x-amzn-errortype",
              "x-amzn-requestid",
              "x-amzn-trace-id"
            ]
          },
          "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
          "smithy.api#title": "AWS License Manager User Subscriptions",
          "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
              "Region":
{
                "builtIn": "AWS::Region",
                "required": false,
                "documentation": "The AWS region used to dispatch the request.",
                "type": "String"
              },
              "UseDualStack": {
                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                "type": "Boolean"
              },
              "UseFIPS": {
                "builtIn": "AWS::UseFIPS",
                "required": true,
                "default": false,
                "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                "type": "Boolean"
              },
              "Endpoint": {
                "builtIn": "SDK::Endpoint",
                "required": false,
                "documentation": "Override the endpoint used to send this request",
                "type": "String"
              }
            },
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "isSet",
```

```
            "argv": [
              {
                "ref": "Endpoint"
              }
            ]
          }
        ],
        "rules": [
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }
            ],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
          },
          {
            "conditions": [
              {

                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
          },
          {
            "conditions": [],
            "endpoint": {
              "url": {
                "ref": "Endpoint"
              },

      "properties": {},
              "headers": {}
```

```
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Region"
                    }
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "aws.partition",

                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ],
                        "assign": "PartitionResult"
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },

true
                                ]
                            },
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
```

```
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

"fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  },

                {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }

            ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-
```

```
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }

    ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [

 {
                                        "ref": "UseFIPS"
                                    },
                                    true
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            {
                                                "fn": "getAttr",
                                                "argv": [

                    {
                                                        "ref": "PartitionResult"
                                                    },
                                                    "supportsFIPS"
                                                ]
                                            },
```

```
                                true
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {

        "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled but this partition does not support FIPS",
                    "type": "error"

}
                ],
                "type": "tree"
            },
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }
                ],
                "rules": [
                    {

    "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
```

```
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]

            }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }

                    ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "error": "DualStack is enabled but this partition does not support DualStack",
                        "type": "error"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
```

```
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
        ]
    },
    "smithy.rules#endpointTests": {
        "testCases": [
            {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                "expect":
{
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                }
            },
            {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                    }
                },
                "params": {
                    "Region": "us-east-1",

        "UseFIPS": true,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                    }
                },
```

```
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS":
true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
```

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        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
          },
```

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      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
         "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
```

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                "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
              }
            },
            "params": {
              "Region": "us-iso-east-1",
              "UseFIPS": true,
              "UseDualStack": false

}
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
            }

      },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack
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disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
                      }
                    },
                    "params": {
                      "Region": "us-isob-east-1",
                      "UseFIPS": true,
                      "UseDualStack": false
                    }
                  },
                  {
                    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
                    "expect": {
                      "error": "DualStack is enabled but this partition does not support DualStack"
                    },
                    "params": {
                      "Region": "us-isob-east-1",

 "UseFIPS": false,
                      "UseDualStack": true
                    }
                  },
                  {
                    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
                      }
                    },
                    "params": {
                      "Region": "us-isob-east-1",
                      "UseFIPS": false,
                      "UseDualStack": false
                    }
                  },
                  {
                    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
                    "expect": {

                     "endpoint": {
                        "url": "https://example.com"
                      }
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": false,
```

```
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack":
false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "Missing region",
      "expect": {
        "error": "Invalid Configuration: Missing Region"
```

```
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
    "type": "structure",
    "members": {
        "ProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
             "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
            }
        },
        "HealthStatus": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
            "traits": {
                "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
            }
        },
        "Ipv4Address": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Information
 about a Remote Desktop Services (RDS) license server.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
    "type": "structure",
    "members": {
        "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
            }
        },
        "ServerType": {
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            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of license server.</p>"
            }
          },
          "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

   "traits": {
              "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is one.</p>"
            }
          },
          "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits":
 {
              "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server.</p>"
            }
          },
          "LicenseServerEndpointProvisioningStatus": {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
            "traits": {
              "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint</p>"
            }
          },
          "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
```

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            },

           "CreationTime": {
              "target": "smithy.api#Timestamp",
              "traits": {
                 "smithy.api#documentation": "<p>The timestamp when License Manager created the license server endpoint.</p>"
              }
           }
        },
        "traits": {
           "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
     },
     "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
     },
     "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
           "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
     },
     "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

  "type": "string",
        "traits": {
           "smithy.api#enum": [
              {
                 "name": "PROVISIONING",
                 "value": "PROVISIONING",
                 "documentation": ""
              },
              {
                 "name": "PROVISIONING_FAILED",
                 "value": "PROVISIONING_FAILED",
                 "documentation": ""
              },
              {
                 "name": "PROVISIONED",
                 "value": "PROVISIONED",
                 "documentation": ""
              },
              {
                 "name": "DELETING",
                 "value": "DELETING",
                 "documentation": ""
```

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          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""

          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
    "type": "string",
    "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
    }
},
 "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
    "type": "structure",
    "members": {
        "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
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            "traits": {
              "smithy.api#documentation": "<p>The type of license server.</p>",
              "smithy.api#required": {}
            }
          },
          "ServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {

          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
```

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            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/ListIdentityProviders"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "IdentityProviderSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use
 the following filters to streamline results:</p>\n        <ul>\n          <li>\n            <p>Product</p>\n          </li>\n
        <li>\n            <p>DirectoryId</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
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    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
      "type": "structure",
      "members": {
        "IdentityProviderSummaries": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

          "traits": {
            "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
            "smithy.api#required": {}
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
      "type": "operation",
       "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
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            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },

    {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
          }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members":
{
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n
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        <li>\n            <p>InstanceId</p>\n          </li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next
 token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
```

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            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/license-server/ListLicenseServerEndpoints"
          },

       "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "LicenseServerEndpoints"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
             "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n              <p>IdentityProviderArn</p>\n          </li>\n        </ul>"
```

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            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type":
 "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
          {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
 {
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
```

```
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
             "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n        <li>\n          <p>Status</p>\n        </li>\n        <li>\n          <p>Username</p>\n
</li>\n        <li>\n          <p>Domain</p>\n        </li>\n      </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating.
 This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service
 hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#readonly": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags you want to retrieve.</p>",
```

```
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}

     }
       }
    },
    "traits": {
       "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
       "Tags": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
          "traits": {
             "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
          }
       }
    },
    "traits": {
       "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
       "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
       "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
     },
    "errors": [
       {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
       },
       {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
       },
       {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
       },
       {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
       },
       {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
       },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which
 provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
 request.</p>"
                }
            },
            "Filters": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {

    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n        <ul>\n
  <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n          </li>\n
<li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummaries": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username":
```

```
{
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
           "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
            }
```

```
            },
            "SubscriptionStartDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
               }
            },
            "SubscriptionEndDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The end date of a subscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
         "type":
 "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
         "type": "structure",
         "members": {
            "RdsSalCredentialsProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider":
 {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
```

```
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target":
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {

    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
```

```
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits":
 {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation":
 "<p>Metadata that describes the results of an identity provider operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
```

```
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",

     "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains credentials.</p>",
              "smithy.api#length": {
                "min": 1
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
          "smithy.api#length": {

           "min": 5,
            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
      "type": "structure",
      "members": {
        "Endpoint": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
      "type": "union",
      "members": {
        "RdsSalSettings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
           "traits": {
            "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "RDS_SAL",
            "value": "RDS_SAL",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
      "type": "structure",
      "members": {
        "message": {
```

```
  "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

             "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

        },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n        <note>\n        <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/StartProductSubscription"
          }

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
            "smithy.api#required": {}
          }
        },
        "IdentityProvider": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {

  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n        <p>Valid values:
<code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n
</p>",
              "smithy.api#required": {}
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }

  }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
```

```
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

    },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

    },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
```

```
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"

            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
                "smithy.api#required": {}
            }

    }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {

  "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
```

```
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
"<p>Adds tags to a resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation":
"<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {

             "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
              "method": "DELETE",
              "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}

          }
            },
            "TagKeys": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
              "traits": {
                "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                "smithy.api#httpQuery": "tagKeys",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
          "smithy.api#http": {

       "code": 200,
            "method": "POST",
            "uri": "/identity-provider/UpdateIdentityProviderSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
```

```
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },

            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
                }
            },
            "UpdateSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
                    "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n                <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
        <li>\n                <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n                <p>Security
 group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
                "traits": {
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
            "AddSubnets": {
```

```
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
              "smithy.api#required": {}
            }
          },
          "RemoveSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that
 allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for
activation servers.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A parameter is not valid.</p>",
          "smithy.api#error": "client"
        }
      }
    }
}
```


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ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper

```
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}
```

```
type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
```

```
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
```

```
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
{
   "smithy": "2.0",
   "metadata": {
      "suppressions": [
         {
            "id": "HttpMethodSemantics",
            "namespace": "*"
         },
         {
            "id": "HttpResponseCodeSemantics",
            "namespace": "*"
         },
         {
            "id": "PaginatedTrait",
            "namespace": "*"
         },
         {
            "id": "HttpHeaderTrait",
            "namespace": "*"
         },
         {
            "id": "HttpUriConflict",
```

```
            "namespace": "*"
        },
        {
            "id": "Service",
            "namespace": "*"
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
             },
            {
                "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
            },
            {
```

```
      "target": "com.amazonaws.licensemanager#CreateToken"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseUsage"
    },
    {
      "target": "com.amazonaws.licensemanager#GetServiceSettings"
    },
    {
      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
```

```
 },
{
   "target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
   "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenses"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

  "target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
   "target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
   "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
   "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
   "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
   "target": "com.amazonaws.licensemanager#ListResourceInventory"
},
{
   "target": "com.amazonaws.licensemanager#ListTagsForResource"
},
{
   "target": "com.amazonaws.licensemanager#ListTokens"
},
{
```

```
                "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
              },
              {
                "target": "com.amazonaws.licensemanager#RejectGrant"
              },
              {
                "target": "com.amazonaws.licensemanager#TagResource"
              },
              {
                "target": "com.amazonaws.licensemanager#UntagResource"
              },
              {
                "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
              },
              {
                "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
              },
              {
                "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
              },
              {
                "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
              }
            ],
            "traits": {
              "aws.api#service": {
                 "sdkId": "License Manager",
                "arnNamespace": "license-manager",
                "cloudFormationName": "LicenseManager",
                "cloudTrailEventSource": "licensemanager.amazonaws.com",
                "endpointPrefix": "license-manager"
              },
              "aws.auth#sigv4": {
                "name": "license-manager"
              },
              "aws.protocols#awsJson1_1": {},
              "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software
vendors across multiple \n         Amazon Web Services accounts and on-premises servers.</p>",
              "smithy.api#title": "AWS License Manager",
              "smithy.api#xmlNamespace": {
                "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
              },
              "smithy.rules#endpointRuleSet": {
                "version": "1.0",
                "parameters": {
                  "Region": {
                    "builtIn": "AWS::Region",
                    "required": false,
```

```
            "documentation": "The AWS region used to dispatch the request.",
            "type": "String"
          },
          "UseDualStack": {
            "builtIn": "AWS::UseDualStack",
            "required": true,
            "default": false,
            "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
            "type": "Boolean"
          },
          "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]

              }
            ],
            "type": "tree",
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
```

```
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {

"conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                   },
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ]
          },
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
```

```
                ],
                "type": "tree",
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "aws.partition",
                        "argv": [
                          {
                            "ref": "Region"
                          }
                        ],
                        "assign": "PartitionResult"
                      }
                    ],
                    "type": "tree",
                    "rules": [
                      {
                        "conditions": [
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {
                                "ref":
"UseFIPS"
                              },
                              true
                            ]
                          },
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {
                                "ref": "UseDualStack"
                              },
                              true
                            ]
                          }
                        ],
                        "type": "tree",
                        "rules": [
                          {
                            "conditions": [
                              {
                                "fn": "booleanEquals",
                                "argv": [
                                  true,
                                  {
```

```
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]

                                }
                            ]
                        },
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },

    "supportsDualStack"
                                        ]
                                    }
                                ]
                            }
                        ],
                        "type": "tree",
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}

                                },
                                "type": "endpoint"
                            }
                        ]
                    },
                    {
                        "conditions": [],
                        "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                        "type": "error"
```

```
        }
      ]
    },
    {
      "conditions": [
        {
          "fn": "booleanEquals",

     "argv": [
              {
                "ref": "UseFIPS"
              },
              true
            ]
        }
      ],
      "type": "tree",
      "rules": [
        {
          "conditions": [
            {
              "fn": "booleanEquals",
              "argv": [
                true,

{
                  "fn": "getAttr",
                  "argv": [
                    {
                      "ref": "PartitionResult"
                    },
                    "supportsFIPS"
                  ]
                }
              ]
            }
          ],
          "type": "tree",
          "rules": [

{
              "conditions": [],
              "endpoint": {
                "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
                "properties": {},
                "headers": {}
              },
              "type": "endpoint"
```

```
                }
              ]
            },
            {
              "conditions": [],
              "error": "FIPS is enabled but this
partition does not support FIPS",
              "type": "error"
            }
          ]
        },
        {
          "conditions": [
            {
              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseDualStack"
                },
                true
              ]
            }
          ],
          "type": "tree",
           "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    true,
                    {
                      "fn": "getAttr",
                      "argv": [
                        {
                          "ref": "PartitionResult"
                        },

    "supportsDualStack"
                        ]
                      }
                    ]
                  }
                ],
                "type": "tree",
                "rules": [
                  {
                    "conditions": [],
```

```
                                    "endpoint": {
                                        "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}

                                    },
                                        "type": "endpoint"
                                    }
                                ]
                            },
                            {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                            }
                        ]
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                             "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ]
            }
        ]
    },
    {
        "conditions": [],
        "error": "Invalid Configuration: Missing Region",
        "type": "error"
    }
  ]
},
"smithy.rules#endpointTests": {
    "testCases": [
    {
        "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
        "expect": {
            "endpoint":
{
                "url": "https://license-manager.af-south-1.amazonaws.com"
            }
        },
```

```
    "params": {
      "Region": "af-south-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.ap-east-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "ap-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.ap-northeast-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "ap-northeast-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.ap-northeast-2.amazonaws.com"
      }
    },
    "params": {
      "Region": "ap-northeast-2",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
    "expect": {
```

```
            "endpoint": {
              "url": "https://license-manager.ap-northeast-3.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-northeast-3",
            "UseFIPS": false,
            "UseDualStack": false
          }

    },
        {
          "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-south-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-1.amazonaws.com"

     }
          },
          "params": {
            "Region": "ap-southeast-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-southeast-2",
            "UseFIPS": false,
```

```
            "UseDualStack": false
          }
        },
        {

    "documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-3.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-southeast-3",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ca-central-1.amazonaws.com"
            }
          },

         "params": {
            "Region": "ca-central-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-central-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-central-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-north-1 with FIPS
disabled and DualStack disabled",
          "expect": {
```

```
            "endpoint": {
              "url": "https://license-manager.eu-north-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-north-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-south-1.amazonaws.com"
            }
          },
          "params": {
            "Region":
"eu-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-west-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
          "expect": {

          "endpoint": {
              "url": "https://license-manager.eu-west-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-2",
            "UseFIPS": false,
```

```
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-west-3.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-3",
            "UseFIPS": false,

"UseDualStack": false
          }
        },
        {
          "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.me-south-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "me-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.sa-east-1.amazonaws.com"
             }
          },
          "params": {
            "Region": "sa-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-east-1.amazonaws.com"
```

```
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }

    },
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-fips.us-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.us-east-2.amazonaws.com"
              }

           },
            "params": {
              "Region": "us-east-2",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-fips.us-east-2.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-2",
              "UseFIPS": true,
              "UseDualStack": false
            }
```

```
        },
        {
          "documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-west-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-west-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-west-1.amazonaws.com"
            }
          },
          "params": {

      "Region": "us-west-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-west-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-west-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

"expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-west-2.amazonaws.com"
```

```
            }
          },
          "params": {
            "Region": "us-west-2",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,

            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
```

```
    },
    {
      "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-northwest-1",
        "UseFIPS": false,
        "UseDualStack": false

}
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
         }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
```

```
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },

{
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
        }
       },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-west-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-west-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation":
```

```
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
                      }
                    },
                    "params": {
                      "Region": "us-gov-west-1",
                      "UseFIPS": true,
                      "UseDualStack": false
                    }
                  },
                  {
                    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager-fips.us-gov-east-1.api.aws"
                      }
                    },

    "params": {
                      "Region": "us-gov-east-1",
                      "UseFIPS": true,
                      "UseDualStack": true
                    }
                  },
                  {
                    "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager.us-gov-east-1.api.aws"
                      }
                    },
                    "params": {
                      "Region": "us-gov-east-1",
                      "UseFIPS": false,
                      "UseDualStack": true
                    }
                  },
                  {
                    "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
                    "expect": {
                      "endpoint": {
                        "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
                      }
                    },
                    "params": {
```

```
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled
but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
            }
          },
```

```
            "params": {
              "Region": "us-isob-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },

          {
            "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
              "Region": "us-isob-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
              }
            },

      "params": {
              "Region": "us-isob-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "error": "DualStack is enabled but this partition does not support DualStack"
            },
            "params": {
              "Region": "us-isob-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

  "expect": {
              "endpoint": {
```

```
            "url": "https://example.com"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": false,
          "Endpoint": "https://example.com"
        }
      },
      {
        "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
        "expect": {
          "endpoint": {
            "url": "https://example.com"
          }
        },
        "params": {
          "UseFIPS": false,

    "UseDualStack": false,
          "Endpoint": "https://example.com"
        }
      },
      {
        "documentation": "For custom endpoint with fips enabled and dualstack disabled",
        "expect": {
          "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": false,
          "Endpoint": "https://example.com"
        }
      },
      {
        "documentation": "For custom endpoint with fips disabled and dualstack enabled",
        "expect": {
          "error":
 "Invalid Configuration: Dualstack and custom endpoint are not supported"
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": true,
          "Endpoint": "https://example.com"
```

```
                    }
                },
                {
                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    }
},
"com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
    "output": {
        "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"

  }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanager#AcceptGrantRequest": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant
ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
          "Message": {
```

```
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
            "httpResponseCode": 401
          },
          "smithy.api#documentation": "<p>Access to resource denied.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 401
        }
      },
      "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
        "type": "enum",
        "members": {
          "DISTRIBUTED_GRANTS_ONLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
            }
          },
          "ALL_GRANTS_PERMITTED_BY_ISSUER": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#AllowedOperation": {

    "type": "enum",
        "members": {
          "CREATE_GRANT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CreateGrant"
            }
          },
          "CHECKOUT_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckoutLicense"
            }
          },
          "CHECKOUT_BORROW_LICENSE": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckoutBorrowLicense"
            }
          },
          "CHECK_IN_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckInLicense"
            }
          },
          "EXTEND_CONSUMPTION_LICENSE":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ExtendConsumptionLicense"
            }
          },
          "LIST_PURCHASED_LICENSES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ListPurchasedLicenses"
            }
          },
          "CREATE_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CreateToken"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max":
7
          }
        }
      },
      "com.amazonaws.licensemanager#Arn": {
        "type": "string",
        "traits": {
```

```
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
{
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n        policy associated with this account.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
    },
```

```
 "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
          "smithy.api#default": false
        }
      },
      "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
          "AllowEarlyCheckIn": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
              "smithy.api#required": {}
            }
          }

},
        "traits": {
          "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
      },
      "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
      },
      "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
      },
      "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
          {
```

```
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

      },
          {
            "target": "com.amazonaws.licensemanager#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
      },
      "com.amazonaws.licensemanager#CheckInLicenseRequest":
 {
        "type": "structure",
        "members": {
          "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License consumption token.</p>",
              "smithy.api#required": {}
            }
          },
          "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License beneficiary.</p>"
            }
          }
        },
```

```
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
{
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n         For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Information about constraints.</p>"
            }
        },
        "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
                "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                "smithy.api#required": {}
            }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
      "type": "structure",
      "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed":
{
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        },
        "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Signed token.</p>"
              }
            },
            "IssuedAt": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
              }
            },
            "Expiration": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
              }
            },
            "CheckoutMetadata": {
              "target": "com.amazonaws.licensemanager#MetadataList",
              "traits": {
                "smithy.api#documentation": "<p>Information about constraints.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#CheckoutLicense": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
           },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
```

```
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target":
"com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n        <p>If the
account that created the license is the same that is performing the check out, you must\n        specify the account
as the beneficiary.</p>\n        </note>"
          }
        },
        "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
          "type": "structure",
          "members": {
            "ProductSKU": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Product
SKU.</p>",
                "smithy.api#required": {}
              }
            },
            "CheckoutType": {
              "target": "com.amazonaws.licensemanager#CheckoutType",
              "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>",
                "smithy.api#required": {}
              }
            },
            "KeyFingerprint": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
```

```
                "smithy.api#required": {}
              }
            },
            "Entitlements": {
              "target": "com.amazonaws.licensemanager#EntitlementDataList",
              "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",

      "smithy.api#required": {}
                }
            },
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientToken",
              "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            },
            "Beneficiary": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>"
              }
            },
            "NodeId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
              }
            }
          },
          "traits": {

          "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#CheckoutLicenseResponse": {
          "type": "structure",
          "members": {
            "CheckoutType": {
              "target": "com.amazonaws.licensemanager#CheckoutType",
              "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>"
              }
            },
            "LicenseConsumptionToken": {
              "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>License consumption token.</p>"
            }
          },
          "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
          },
           "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
              "smithy.api#documentation": "<p>Signed token.</p>"
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
          },
          "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
          },
          "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
            }
          },
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutType": {
        "type": "enum",
```

```
      "members": {
        "PROVISIONAL": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "PROVISIONAL"
          }
        },
        "PERPETUAL": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "PERPETUAL"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#ClientRequestToken": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 36
        }
      }
    },
    "com.amazonaws.licensemanager#ClientToken": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 2048
        },
        "smithy.api#pattern": "^\\S+$"
      }
    },
    "com.amazonaws.licensemanager#ConflictException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "ConflictException",
          "httpResponseCode":
409
        },
        "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
```

```
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },

 "traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
            "RenewType": {
                "target": "com.amazonaws.licensemanager#RenewType",
                "traits": {
                    "smithy.api#documentation": "<p>Renewal frequency.</p>"
                }
            },
            "ProvisionalConfiguration": {
                "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
                 }
            },
            "BorrowConfiguration": {
```

```
            "target": "com.amazonaws.licensemanager#BorrowConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target":
 "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
 license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
 organizational unit (OU). For more
  information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
 licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          },
          "GrantName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant name.</p>",
              "smithy.api#required": {}

    }
          },
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          },
          "Principals": {
            "target": "com.amazonaws.licensemanager#PrincipalArnList",
            "traits": {
              "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an
Amazon Resource Name\n        (ARN):</p>\n        <ul>\n          <li>\n            <p>An Amazon Web Services
account, which includes only the account specified.</p>\n          </li>\n        </ul>\n        <ul>\n          <li>\n
    <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n          </li>\n        </ul>\n
<ul>\n
          <li>\n            <p>An organization, which will include all accounts across your organization.</p>\n
</li>\n        </ul>",
              "smithy.api#required": {}
            }
          },
          "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Home Region of the grant.</p>",
              "smithy.api#required": {}
            }
          },
```

```
        "AllowedOperations": {
          "target": "com.amazonaws.licensemanager#AllowedOperationList",
          "traits": {
            "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },

  "com.amazonaws.licensemanager#CreateGrantResponse": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CreateGrantVersion":
{
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
      },
```

```
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information,
see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",

  "smithy.api#required": {}
                }
            },
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
```

```
        "GrantName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant name.</p>"
          }
        },
        "AllowedOperations": {
          "target": "com.amazonaws.licensemanager#AllowedOperationList",
          "traits": {
            "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "StatusReason": {
          "target": "com.amazonaws.licensemanager#StatusReasonMessage",
          "traits": {
            "smithy.api#documentation": "<p>Grant status reason.</p>"
          }
        },
        "SourceVersion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Current version of the grant.</p>"
          }
        },
        "Options": {
          "target": "com.amazonaws.licensemanager#Options",
          "traits": {
            "smithy.api#documentation": "<p>The options specified for the grant.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant ARN.</p>"
```

```
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
          }
        },
        "traits":
{
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicense": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
           },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
```

```
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a license.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a license configuration.</p>\n          <p>A license configuration is an abstraction of a customer license agreement that can be\n          consumed and enforced by License Manager. Components include specifications for the license\n          type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n          Dedicated Instance, Dedicated Host, or all of these), license affinity  to host (how long a \n          license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
          "Name": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
          },
          "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
             "traits": {
              "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
          },
          "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
            }
          },
          "LicenseRules": {
            "target":
 "com.amazonaws.licensemanager#StringList",
            "traits": {
              "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n          <li>\n            <p>\n              <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
          <code>licenseAffinityToHost</code> |\n            <code>maximumCores</code> |
<code>minimumCores</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n            <code>maximumCores</code> |
<code>minimumCores</code> |\n            <code>maximumSockets</code> | <code>minimumSockets</code> |\n
        <code>maximumVcpus</code> | <code>minimumVcpus</code>\n            </p>\n          </li>\n
<li>\n
  <p>\n            <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n            <code>maximumSockets</code> |
<code>minimumSockets</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
```

<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n \n \n \n The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>. "
            }
          },

  "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": " Tags to add to the license configuration. "
            }
          },
          "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": " When true, disassociates a resource when software is
uninstalled. "
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": " Product information. "
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
{
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": " Amazon Resource Name (ARN) of the license configuration. "
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }

```
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {

          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
            "smithy.api#required": {}
          }
        },
        "SourceLicenseContext": {
          "target": "com.amazonaws.licensemanager#LicenseConversionContext",
          "traits": {
```

```
                "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n         For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                "smithy.api#required": {}
              }
            },
            "DestinationLicenseContext":
{
              "target": "com.amazonaws.licensemanager#LicenseConversionContext",
              "traits": {
                "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
          "type": "structure",
          "members": {
            "LicenseConversionTaskId": {
              "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

           "traits": {
                "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
          },
          "errors": [
            {
```

```
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
          "ReportGeneratorName":
{
            "target": "com.amazonaws.licensemanager#ReportGeneratorName",
            "traits": {
              "smithy.api#documentation": "<p>Name of the report generator.</p>",
              "smithy.api#required": {}
            }
          },
          "Type": {
            "target": "com.amazonaws.licensemanager#ReportTypeList",
            "traits": {
              "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be
generated:</p>\n <ul>\n <li>\n <p>License configuration report - Reports the number and
details of consumed licenses for a license configuration.</p>\n </li>\n <li>\n <p>Resource
report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n </li>\n
</ul>",
              "smithy.api#required": {}
```

```
        }
            },
            "ReportContext": {
              "target": "com.amazonaws.licensemanager#ReportContext",
              "traits": {
                "smithy.api#documentation": "<p>Defines the type of license configuration the report generator tracks.</p>",
                "smithy.api#required": {}
              }
            },
            "ReportFrequency": {
              "target": "com.amazonaws.licensemanager#ReportFrequency",
              "traits": {
                "smithy.api#documentation": "<p>Frequency by which reports are generated.  Reports can be generated daily, monthly, or weekly.</p>",
                "smithy.api#required": {}
              }
            },
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientRequestToken",
              "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            },
            "Description": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanager#TagList",
              "traits": {
                "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
          "type": "structure",
          "members": {
            "LicenseManagerReportGeneratorArn":
```

```
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
generator.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product
name.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product SKU.</p>",
              "smithy.api#required": {}
            }
          },
          "Issuer": {
            "target": "com.amazonaws.licensemanager#Issuer",
            "traits": {
              "smithy.api#documentation": "<p>License issuer.</p>",
              "smithy.api#required": {}
            }
          },
          "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Home Region for the license.</p>",
```

```
                "smithy.api#required": {}

    }
            },
            "Validity": {
                "target": "com.amazonaws.licensemanager#DatetimeRange",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>",
                    "smithy.api#required": {}
                }
             },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n          usage.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
```

```
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseResponse": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseStatus",
          "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
          }
        },
        "Version": {
           "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersion": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
```

```
            "target": "com.amazonaws.licensemanager#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target":
"com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product name.</p>",
              "smithy.api#required": {}
            }
          },
          "Issuer": {
```

```
            "target": "com.amazonaws.licensemanager#Issuer",
            "traits":
{
                "smithy.api#documentation": "<p>License issuer.</p>",
                "smithy.api#required": {}
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                 "smithy.api#documentation": "<p>Information about the license.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
            }
        },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n         usage.</p>",
                "smithy.api#required": {}
            }
        },

  "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
```

```
                "smithy.api#documentation": "<p>License status.</p>",
                "smithy.api#required": {}
              }
            },
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientToken",
              "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            },
            "SourceVersion": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Current version of the license.</p>"
              }
            }
          },
          "traits": {

 "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>License ARN.</p>"
              }
            },
            "Version": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>New version of the license.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanager#LicenseStatus",
              "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output":
```

```
{}
        }
      },
      "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },

      {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n          <p>A refresh token is a JWT token used to get an access token. With an access token,\n          you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n          call License Manager to manage the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
```

```
            "target": "com.amazonaws.licensemanager#Arn",
            "traits":
{
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n          JWT token.</p>",
                "smithy.api#required": {}
            }
        },
        "RoleArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n          License Manager does not check whether the roles are in use.</p>"
            }
        },
        "ExpirationInDays": {
            "target": "com.amazonaws.licensemanager#Integer",
            "traits": {
                "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The default is 365 days.</p>"
            }
        },
        "TokenProperties": {
             "target": "com.amazonaws.licensemanager#MaxSize3StringList",
            "traits": {
                "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The data is mapped\n          to the amr claim of the JWT token.</p>"
            }
        },
        "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
                "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                "smithy.api#required": {}
            }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
      "type": "structure",
      "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
```

```
        "traits": {
            "smithy.api#documentation": "<p>Token ID.</p>"
          }
        },
        "TokenType": {
          "target": "com.amazonaws.licensemanager#TokenType",
          "traits": {
            "smithy.api#documentation": "<p>Token type.</p>"
          }
        },
        "Token": {
          "target": "com.amazonaws.licensemanager#TokenString",
          "traits": {
            "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DateTime": {
      "type": "timestamp"
    },
    "com.amazonaws.licensemanager#DatetimeRange": {
      "type": "structure",
      "members": {
        "Begin": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Start of the time range.</p>",
            "smithy.api#required": {}
          }
        },
        "End": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>End of the time range.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
      }
    },
    "com.amazonaws.licensemanager#DeleteGrant": {
      "type": "operation",
      "input": {
```

```
            "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
          }
        },
        "com.amazonaws.licensemanager#DeleteGrantRequest": {
          "type": "structure",
          "members": {
            "GrantArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
              }
            },
            "StatusReason": {
              "target": "com.amazonaws.licensemanager#StatusReasonMessage",
              "traits": {
                "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
              }
```

```
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the
grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },

      "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n        <p>You cannot delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members":
{
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
         },
        "errors": [
            {
```

```
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n          <p>This action deletes the report generator, which stops it from generating future reports.\n          The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
          "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {

  "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
```

```
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          },
          "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the license.</p>",
              "smithy.api#required":
{}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseResponse": {
        "type": "structure",
        "members": {
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          },
          "DeletionDate": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
```

```
    },
    "com.amazonaws.licensemanager#DeleteToken": {
      "type": "operation",
       "input": {
         "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
      },
      "output": {
         "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
      },
      "errors": [
         {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
         {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
         {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
         },
         {
            "target": "com.amazonaws.licensemanager#RedirectException"
         },
         {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
         },
         {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
         },

    {
            "target": "com.amazonaws.licensemanager#ValidationException"
         }
      ],
      "traits": {
         "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
      }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
      "type": "structure",
      "members": {
         "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
               "smithy.api#documentation": "<p>Token ID.</p>",
               "smithy.api#required": {}
            }
         }
```

```
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}

        }
      },
      "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "enum",
        "members": {
          "JWT_PS384": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "JWT_PS384"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#Entitlement": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement name.</p>",
              "smithy.api#required": {}
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
            }
          },
          "MaxCount": {
            "target": "com.amazonaws.licensemanager#Long",
            "traits": {
              "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
            }
          },
          "Overage": {
```

```
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
            }
          },
          "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementUnit",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement unit.</p>",
              "smithy.api#required": {}
            }
          },
          "AllowCheckIn": {
            "target":
"com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
        }
      },
      "com.amazonaws.licensemanager#EntitlementData": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement data name.</p>",
              "smithy.api#required": {}
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement
data value.</p>"
            }
          },
          "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement data unit.</p>",
              "smithy.api#required": {}
            }
          }
```

```
        },
        "traits": {
          "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
        }
      },
      "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#EntitlementData"
        }
      },
      "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "enum",
        "members": {
          "COUNT": {
            "target": "smithy.api#Unit",
            "traits": {

"smithy.api#enumValue": "Count"
            }
          },
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "SECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Seconds"
            }
          },
          "MICROSECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Microseconds"
            }
          },
          "MILLISECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Milliseconds"
            }
          },
          "BYTES": {
            "target": "smithy.api#Unit",
```

```
            "traits": {
              "smithy.api#enumValue": "Bytes"
            }
          },
          "KILOBYTES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Kilobytes"
            }
          },
          "MEGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Megabytes"
            }
          },
          "GIGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Gigabytes"
            }
          },
          "TERABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Terabytes"
            }
          },
          "BITS":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Bits"
            }
          },
          "KILOBITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Kilobits"
            }
          },
          "MEGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Megabits"
            }
          },
          "GIGABITS": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits"
            }
        },
        "TERABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits"

}
        },
        "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Percent"
            }
        },
        "BYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes/Second"
            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
             "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
            }
        },
        "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes/Second"
            }
        },
```

```
            "BITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Bits/Second"
              }
            },
            "KILOBITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Kilobits/Second"
              }
            },
            "MEGABITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue":
"Megabits/Second"
              }
            },
            "GIGABITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Gigabits/Second"
              }
            },
            "TERABITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Terabits/Second"
              }
            },
            "COUNT_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Count/Second"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#EntitlementList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#Entitlement"
          }
        },
        "com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
          "type": "structure",
```

```
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#EntitlementUnit": {
      "type": "enum",
      "members": {
        "COUNT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Count"
          }
        },
        "NONE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "None"
          }
        },
        "SECONDS":
{
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Seconds"
          }
        },
        "MICROSECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Microseconds"
          }
        },
        "MILLISECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Milliseconds"
          }
        },
        "BYTES": {
          "target": "smithy.api#Unit",
          "traits": {
```

```
        "smithy.api#enumValue": "Bytes"
      }
    },
    "KILOBYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Kilobytes"
       }
    },
    "MEGABYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Megabytes"
      }
    },
    "GIGABYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Gigabytes"
      }
    },
    "TERABYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Terabytes"
      }
    },
    "BITS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Bits"
      }
    },
    "KILOBITS": {
      "target": "smithy.api#Unit",
      "traits": {

       "smithy.api#enumValue": "Kilobits"
      }
    },
    "MEGABITS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Megabits"
      }
    },
    "GIGABITS": {
      "target": "smithy.api#Unit",
```

```
            "traits": {
              "smithy.api#enumValue": "Gigabits"
            }
          },
          "TERABITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Terabits"
            }
          },
          "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Percent"
            }
          },
          "BYTES_PER_SECOND": {
            "target":
"smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Bytes/Second"
            }
          },
          "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Kilobytes/Second"
            }
          },
          "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Megabytes/Second"
            }
          },
          "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Gigabytes/Second"
            }
          },
          "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {

"smithy.api#enumValue": "Terabytes/Second"
            }
          },
```

```
        "BITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits/Second"
          }
        },
        "KILOBITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits/Second"
          }
        },
        "MEGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabits/Second"
          }
        },
        "GIGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits/Second"
          }
        },

    "TERABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits/Second"
          }
        },
        "COUNT_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Count/Second"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#EntitlementUsage": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Entitlement usage name.</p>",
            "smithy.api#required": {}
          }
```

```
            },
            "ConsumedValue": {
               "target": "com.amazonaws.licensemanager#String",

              "traits": {
                    "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                    "smithy.api#required": {}
               }
            },
            "MaxCount": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
               }
            },
            "Unit": {
               "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
               "traits": {
                  "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
         }
      },
      "com.amazonaws.licensemanager#EntitlementUsageList":
{
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
         }
      },
      "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
               "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
         }
      },
      "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
         "type": "structure",
         "members": {
            "LicenseConsumptionToken": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>License consumption token.</p>",
                  "smithy.api#required": {}

          }
            },
            "DryRun": {
               "target": "com.amazonaws.licensemanager#Boolean",
               "traits": {
                  "smithy.api#default": false,
                  "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
         "type": "structure",
         "members": {
```

```
            "LicenseConsumptionToken": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>License consumption token.</p>"
               }
            },

            "Expiration": {
               "target": "com.amazonaws.licensemanager#ISO8601DateTime",
               "traits": {
                  "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanager#FailedDependencyException": {
         "type": "structure",
         "members": {
            "Message": {
               "target": "com.amazonaws.licensemanager#Message"
            },
            "ErrorCode": {
               "target": "com.amazonaws.licensemanager#String"
            }
         },
         "traits": {
            "aws.protocols#awsQueryError": {
               "code": "FailedDependency",
               "httpResponseCode": 424
            },
            "smithy.api#documentation":
"<p>A dependency required to run the API is missing.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 424
         }
      },
      "com.amazonaws.licensemanager#Filter": {
         "type": "structure",
         "members": {
            "Name": {
               "target": "com.amazonaws.licensemanager#FilterName",
               "traits": {
                  "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
               }
            },
```

```
            "Values": {
                "target": "com.amazonaws.licensemanager#FilterValues",
                "traits": {
                    "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only specify one value for the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter
 name and value pair that is used to return more specific results from a\n          describe operation. Filters can be used to match a set of resources by specific criteria,\n          such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanager#FilterLimitExceededException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FilterLimitExceeded",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#FilterList": {
        "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#Filter"
        }
    },
    "com.amazonaws.licensemanager#FilterName": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValue": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValues": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#FilterValue",
            "traits": {
```

```
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#Filters": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Filter",
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#GetAccessToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n          are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token": {
```

```
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
              "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
              "smithy.api#required": {}
            }
          },
          "TokenProperties": {
            "target": "com.amazonaws.licensemanager#MaxSize3StringList",
            "traits": {
              "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetAccessTokenResponse":
{
        "type": "structure",
        "members": {
          "AccessToken": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
              "smithy.api#documentation": "<p>Temporary access token.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#GetGrant": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetGrantRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#GetGrantResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
    },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
```

```
            "smithy.api#documentation": "<p>Grant details.</p>"
          }
        }
    },
    "traits": {

"smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"

 },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#GetLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
    },
    "output": {
```

```
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
          }
        },
        "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
          "type": "structure",
          "members": {
            "LicenseConfigurationArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits":
 {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
          "type": "structure",
          "members": {
            "LicenseConfigurationId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
```

```
    }
  },
  "LicenseConfigurationArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
    }
  },
  "Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Name of the license configuration.</p>"
     }
  },
  "Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
  },
  "LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
      "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
    }
  },
  "LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
      "smithy.api#documentation": "<p>License rules.</p>"
    }
  },
  "LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",

   "traits": {
      "smithy.api#documentation": "<p>Number of available licenses.</p>"
    }
  },
  "LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
    }
  },
  "ConsumedLicenses": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
```

```
            "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License configuration status.</p>"
          }

    },
        "OwnerAccountId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
          }
        },
        "ConsumedLicenseSummaryList": {
          "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
          }
        },
        "ManagedResourceSummaryList": {
          "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
          }
        },
        "Tags": {
          "target": "com.amazonaws.licensemanager#TagList",
           "traits": {
            "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
          }
        },
        "ProductInformationList": {
          "target": "com.amazonaws.licensemanager#ProductInformationList",
          "traits": {
            "smithy.api#documentation": "<p>Product information.</p>"
          }
        },
        "AutomatedDiscoveryInformation": {
          "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
          "traits": {
            "smithy.api#documentation": "<p>Automated discovery information.</p>"
          }
        },
        "DisassociateWhenNotFound": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
```

```
            "traits": {
              "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTask": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {

 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information
on.</p>",
```

```
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
          "type": "structure",
          "members": {
            "LicenseConversionTaskId": {
              "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
              "traits": {
                "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
              }
            },
            "ResourceArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license conversion task is associated with.</p>"
              }
            },
            "SourceLicenseContext": {
              "target": "com.amazonaws.licensemanager#LicenseConversionContext",
              "traits": {
                "smithy.api#documentation": "<p>Information about the license type converted from.</p>"
              }
            },
            "DestinationLicenseContext": {
              "target": "com.amazonaws.licensemanager#LicenseConversionContext",
              "traits": {
                "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
              }
            },
            "StatusMessage": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
              "traits": {
                "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
              }
```

```
            },

  "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required":
{}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
```

```
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {

"smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
      "type": "structure",
      "members": {
        "License": {
          "target": "com.amazonaws.licensemanager#License",
          "traits": {
            "smithy.api#documentation": "<p>License details.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },

  "com.amazonaws.licensemanager#GetLicenseUsage": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
      },
      "errors": [
        {
```

```
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {

  "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
        "type": "structure",
        "members": {
          "LicenseUsage": {
            "target":
"com.amazonaws.licensemanager#LicenseUsage",
            "traits": {
              "smithy.api#documentation": "<p>License usage details.</p>"
            }
          }
```

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n         and so on.</p>"
```

```
 }
            },
            "SnsTopicArn": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License
Manager.</p>"
               }
            },
            "OrganizationConfiguration": {
               "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n         cross-account discovery.</p>"
               }
            },
            "EnableCrossAccountsDiscovery": {
               "target": "com.amazonaws.licensemanager#BoxBoolean",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
               }

         },
            "LicenseManagerResourceShareArn": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License
Manager management account \n         provides member accounts with access to this share.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanager#Grant": {
         "type": "structure",
         "members": {
            "GrantArn": {
               "target": "com.amazonaws.licensemanager#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                  "smithy.api#required": {}
               }
            },
            "GrantName": {
```

```
 "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ParentArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Parent ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "GranteePrincipalArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {

"smithy.api#documentation": "<p>The grantee principal ARN.</p>",
                    "smithy.api#required": {}
                }
            },
            "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantStatus": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>",
                    "smithy.api#required": {}
                }
            },
            "StatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status reason.</p>"
                 }
            },
```

```
            "Version": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>",
                "smithy.api#required": {}
              }
            },
            "GrantedOperations": {
              "target": "com.amazonaws.licensemanager#AllowedOperationList",
              "traits": {
                "smithy.api#documentation": "<p>Granted operations.</p>",
                "smithy.api#required": {}
              }
            },
            "Options": {
              "target": "com.amazonaws.licensemanager#Options",
              "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation":
"<p>Describes a grant.</p>"
          }
        },
        "com.amazonaws.licensemanager#GrantList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#Grant"
          }
        },
        "com.amazonaws.licensemanager#GrantStatus": {
          "type": "enum",
          "members": {
            "PENDING_WORKFLOW": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "PENDING_WORKFLOW"
              }
            },
            "PENDING_ACCEPT": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "PENDING_ACCEPT"
              }
            },
            "REJECTED": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "REJECTED"

          }
          },
          "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ACTIVE"
            }
          },
          "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
          },
          "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
          },
          "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_DELETE"
            }
          },
          "DISABLED": {
            "target": "smithy.api#Unit",
            "traits":
{
              "smithy.api#enumValue": "DISABLED"
            }
          },
          "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
```

```
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
          }
        },
        "LicenseName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License name.</p>"
          }

    },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product name.</p>"
          }
        },
        "ProductSKU": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product SKU.</p>"
          }
        },
        "Issuer": {
          "target": "com.amazonaws.licensemanager#IssuerDetails",
          "traits": {
            "smithy.api#documentation": "<p>Granted license issuer.</p>"
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

         }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseStatus",
          "traits": {
            "smithy.api#documentation": "<p>Granted license status.</p>"
          }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
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ISO8601-UTC format.</p>"
            }
          },
          "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
            }
          },
          "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
             "traits": {
              "smithy.api#documentation": "<p>License entitlements.</p>"
            }
          },
          "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
          },
          "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Granted license metadata.</p>"
            }
          },
          "CreateTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

  }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Version of the granted license.</p>"
            }
          },
          "ReceivedMetadata": {
            "target": "com.amazonaws.licensemanager#ReceivedMetadata",
            "traits": {
              "smithy.api#documentation": "<p>Granted license received metadata.</p>"
            }
          }
        },
        "traits": {
```

```
            "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
          }
        },
        "com.amazonaws.licensemanager#GrantedLicenseList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#GrantedLicense"
          }
        },
        "com.amazonaws.licensemanager#ISO8601DateTime":
{
          "type": "string",
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
          }
        },
        "com.amazonaws.licensemanager#Integer": {
          "type": "integer"
        },
        "com.amazonaws.licensemanager#InvalidParameterValueException": {
          "type": "structure",
          "members": {
            "Message": {
              "target": "com.amazonaws.licensemanager#Message"
            }
          },
          "traits": {
            "aws.protocols#awsQueryError": {
              "code": "InvalidParameterValueProvided",
              "httpResponseCode": 400
            },
            "smithy.api#documentation":
"<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
          }
        },
        "com.amazonaws.licensemanager#InvalidResourceStateException": {
          "type": "structure",
          "members": {
            "Message": {
              "target": "com.amazonaws.licensemanager#Message"
            }
```

```
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "InvalidResourceState",
            "httpResponseCode": 400
          },
          "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n         <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },

      "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the filter.</p>",
              "smithy.api#required": {}
            }
          },
          "Condition": {
            "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
            "traits": {
              "smithy.api#documentation": "<p>Condition of the filter.</p>",
              "smithy.api#required": {}
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
          }

    },
        "traits": {
          "smithy.api#documentation": "<p>An inventory filter.</p>"
        }
      },
      "com.amazonaws.licensemanager#InventoryFilterCondition": {
        "type": "enum",
        "members": {
          "EQUALS": {
            "target": "smithy.api#Unit",
```

```
            "traits": {
              "smithy.api#enumValue": "EQUALS"
            }
          },
          "NOT_EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "NOT_EQUALS"
            }
          },
          "BEGINS_WITH": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "BEGINS_WITH"
            }
          },
          "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CONTAINS"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
      },
      "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Issuer name.</p>",
              "smithy.api#required": {}
            }
          },
          "SignKey": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage
 of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
            }
          }
```

```
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
      },
      "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Issuer name.</p>"
            }
          },
          "SignKey": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage of sign and verify, \n          and support the RSASSA-PSS SHA-256 signing
algorithm.</p>"
            }
          },
          "KeyFingerprint": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
        }
      },
      "com.amazonaws.licensemanager#License": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

           "smithy.api#documentation": "<p>License name.</p>"
            }
```

```
        },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product name.</p>"
          }
        },
        "ProductSKU": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product SKU.</p>"
          }
        },
        "Issuer": {
          "target": "com.amazonaws.licensemanager#IssuerDetails",
          "traits": {
            "smithy.api#documentation": "<p>License issuer.</p>"
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {

        "smithy.api#documentation": "<p>Home Region of the license.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseStatus",
          "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
          }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
          }
        },
        "Beneficiary": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License beneficiary.</p>"
          }
        },
        "Entitlements": {
```

```
    "target": "com.amazonaws.licensemanager#EntitlementList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>"
                }
            },
            "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
                }
            },
            "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>License metadata.</p>"
                }
            },
            "CreateTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>License
creation time.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                 "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
```

```
        }
      },
      "Name": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Name of the license configuration.</p>"
        }
      },
      "Description": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Description of the license configuration.</p>"
        }
      },
      "LicenseCountingType": {
        "target": "com.amazonaws.licensemanager#LicenseCountingType",
        "traits": {
          "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
         }
      },
      "LicenseRules": {
        "target": "com.amazonaws.licensemanager#StringList",
        "traits": {
          "smithy.api#documentation": "<p>License rules.</p>"
        }
      },
      "LicenseCount": {
        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
          "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
        }
      },
      "LicenseCountHardLimit": {
        "target": "com.amazonaws.licensemanager#BoxBoolean",
        "traits": {
          "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
        }
      },
      "DisassociateWhenNotFound": {
        "target": "com.amazonaws.licensemanager#BoxBoolean",
         "traits": {
          "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
        }
      },
      "ConsumedLicenses": {
        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
```

```
            "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Status of the license configuration.</p>"
          }
        },
        "OwnerAccountId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

       }
        },
        "ConsumedLicenseSummaryList": {
          "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
          }
        },
        "ManagedResourceSummaryList": {
          "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
          }
        },
        "ProductInformationList": {
          "target": "com.amazonaws.licensemanager#ProductInformationList",
          "traits": {
            "smithy.api#documentation": "<p>Product information.</p>"
          }
        },
        "AutomatedDiscoveryInformation": {

          "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
          "traits": {
            "smithy.api#documentation": "<p>Automated discovery information.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
        "type": "structure",
        "members": {
          "ResourceArn":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Type of server resource.</p>"
            }
          },
          "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource
consuming licenses.</p>"
            }
          },
          "AssociationTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
            }
          },
          "AmiAssociationScope": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
```

```
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members":
{
          "AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "AVAILABLE"
            }
          },
          "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISABLED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits":
{
              "smithy.api#documentation": "<p>Type of resource.</p>"
            }
          },
          "ResourceStatus": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Status of the resource.</p>"
            }
          },
          "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
            }
          },
```

```
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time when the license configuration was initially associated with the resource.</p>"
                }
            },

        "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfiguration"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionContext": {

  "type": "structure",
        "members": {
            "UsageOperation": {
                "target": "com.amazonaws.licensemanager#UsageOperation",
                "traits": {
                    "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you are converting your resource from.  For more information about which platforms correspond to which usage operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n        </p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {

       "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
            }
          },
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n         conversion task.</p>"
            }
          },
          "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
            }
          },
          "DestinationLicenseContext": {
            "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the conversion task.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
          },
          "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
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```
            "traits": {
                "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
            }
          },
          "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
            }
          },
          "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTaskId": {
        "type": "string",
        "traits": {

         "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
        "type": "enum",
        "members": {
          "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "IN_PROGRESS"
            }
          },
          "SUCCEEDED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "SUCCEEDED"
            }
```

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            },
            "FAILED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
            "VCPU": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "vCPU"
                }
            },
            "INSTANCE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Instance"
                }
            },
            "CORE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Core"
                }
            },
            "SOCKET": {
                "target": "smithy.api#Unit",
                 "traits": {
                    "smithy.api#enumValue": "Socket"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseDeletionStatus": {
        "type": "enum",
        "members": {
```

```
        "PENDING_DELETE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "PENDING_DELETE"
          }
        },
        "DELETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DELETED"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#LicenseList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#License"
      }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailure": {

      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
          }
        },
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Resource type.</p>"
          }
        },
        "ErrorMessage": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Error message.</p>"
          }
        },
        "FailureTime": {
          "target": "com.amazonaws.licensemanager#DateTime",
          "traits": {

    "smithy.api#documentation": "<p>Failure time.</p>"
          }
```

```
            },
            "OperationName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Name of the operation.</p>"
              }
            },
            "ResourceOwnerId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
              }
            },
            "OperationRequestedBy": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
              }
            },
            "MetadataList": {

              "target": "com.amazonaws.licensemanager#MetadataList",
              "traits": {
                "smithy.api#documentation": "<p>Reserved.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
          }
        },
        "com.amazonaws.licensemanager#LicenseOperationFailureList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
          }
        },
        "com.amazonaws.licensemanager#LicenseSpecification": {
          "type": "structure",
          "members": {
            "LicenseConfigurationArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
```

```
            "smithy.api#required": {}
            }
          },
          "AmiAssociationScope": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseSpecifications": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseSpecification"
        }
      },
      "com.amazonaws.licensemanager#LicenseStatus": {
        "type": "enum",
        "members": {
          "AVAILABLE": {
            "target": "smithy.api#Unit",

          "traits": {
              "smithy.api#enumValue": "AVAILABLE"
            }
          },
          "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
          },
          "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DEACTIVATED"
            }
          },
          "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "SUSPENDED"
            }
```

```
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },

     "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseUsage": {
    "type": "structure",
    "members": {
        "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlement usages.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

    }
},
"com.amazonaws.licensemanager#LicenseUsageException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "LicenseUsageFailure",
            "httpResponseCode": 412
```

```
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {

    "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n          <p>Resource associations need not consume licenses from a license
configuration. \n          For example, an AMI or a stopped instance might not consume a license (depending on \n
the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results
to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
          "LicenseConfigurationAssociations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
            "traits": {
              "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
            }
          },
          "NextToken": {

"target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListDistributedGrants": {
        "type": "operation",
        "input": {
```

```
            "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {

            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>LicenseArn</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                    <code>GrantStatus</code>\n                </p>\n            </li>\n
```

```
<li>\n <p>\n <code>GranteePrincipalARN</code>\n </p>\n </li>\n
<li>\n <p>\n <code>ProductSKU</code>\n </p>\n </li>\n <li>\n
<p>\n <code>LicenseIssuerName</code>\n
</p>\n </li>\n </ul>"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": "<p>Token for the next set of results.</p>"
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",

"traits": {
"smithy.api#documentation": "<p>Distributed grant details.</p>"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": "<p>Token for the next set of results.</p>"
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
```

```
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
        },
        "errors": [
          {

"target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
```

```
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
        "type": "structure",
        "members": {
          "LicenseOperationFailureList": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
            "traits": {
              "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConfigurations": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },

    "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
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            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n                Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n                Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n                Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
    </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n                Logical operators are
```

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<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n        </ul>"
                }
              }
            },
            "traits": {
              "smithy.api#input": {}
            }
          },
          "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
            "type": "structure",
            "members": {
              "LicenseConfigurations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurations",
                "traits": {
                  "smithy.api#documentation": "<p>Information about the license configurations.</p>"
                }
              },
              "NextToken": {
                "target": "com.amazonaws.licensemanager#String",

             "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
              }
            },
            "traits": {
              "smithy.api#output": {}
            }
          },
          "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
            "type": "operation",
            "input": {
              "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
            },
            "output": {
              "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
            },
            "errors": [
              {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
              },
              {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
              },
              {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
              },
              {
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                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
        "type": "structure",
        "members": {
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {

   "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>\n         Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTasks": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configuration tasks for your
 account.</p>"
                }
            },
```

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            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n       <ul>\n          <li>\n             <p>\n                <code>LicenseConfigurationArn</code>\n
</p>\n          </li>\n       </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits":
{
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
          "ReportGenerators": {
            "target": "com.amazonaws.licensemanager#ReportGeneratorList",
            "traits": {
              "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
```

```
        }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
```

```
            "traits": {

      "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {
          "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
              "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
          },
          "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
```

```
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
```

```
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
      "type": "structure",
      "members": {
        "LicenseArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
          }
        },

      "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n
   <li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>Status</code>\n            </p>\n          </li>\n        </ul>"
            }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token
 for the next set of results.</p>"
            }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse": {
      "type": "structure",
      "members": {
        "Licenses": {
          "target": "com.amazonaws.licensemanager#LicenseList",
          "traits": {
            "smithy.api#documentation": "<p>License details.</p>"
            }
        },
```

```
            "NextToken": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {

   "smithy.api#documentation": "<p>Token for the next set of results.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanager#ListReceivedGrants": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
               "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while
   specifying the\n         recipient as this Amazon Web Services account, your organization, or an organizational unit\n
      (OU) to which this member account belongs.</p>"
         }
```

```
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target":
"com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
            "smithy.api#required": {}
          }
        },
        "Filters": {
```

```
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>ParentArn</code>\n        </p>\n        </li>\n
<li>\n        <p>\n        <code>GranteePrincipalArn</code>\n        </p>\n        </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
              "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
```

```
        "members": {
          "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
             "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>LicenseIssuerName</code>\n            </p>\n
</li>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n          <li>\n
<p>\n
        <code>GranterAccountId</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
             "traits": {
              "smithy.api#documentation": "<p>Received grant details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#ListReceivedLicenses": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
```

```
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {

      "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n
          </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
```

```
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
             "traits": {
              "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
        "type": "structure",
        "members": {
          "LicenseArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
            }
          },

         "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
```

```
</li>\n <li>\n <p>\n <code>Status</code>\n </p>\n </li>\n
<li>\n <p>\n <code>Fingerprint</code>\n </p>\n </li>\n <li>\n
<p>\n <code>IssuerName</code>\n </p>\n </li>\n <li>\n <p>\n
<code>Beneficiary</code>\n </p>\n </li>\n </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
               "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
               "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
               "smithy.api#documentation": "<p>Received license details.</p>"
            }
          },

          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
               "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventory": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
```

```
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FailedDependencyException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
    "type": "structure",
    "members": {
      "MaxResults": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      },
      "Filters": {
        "target": "com.amazonaws.licensemanager#InventoryFilterList",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n are supported:</p>\n <ul>\n <li>\n <p>\n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n </li>\n <li>\n <p>\n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> |  \n <code>windows-server-datacenter</code>.</p>\n </li>\n <li>\n <p>\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n </li>\n <li>\n <p>\n <code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n <code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account).</p>\n </li>\n </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
        "type": "structure",
        "members": {
          "ResourceInventoryList": {
            "target": "com.amazonaws.licensemanager#ResourceInventoryList",
            "traits": {
              "smithy.api#documentation": "<p>Information about the resources.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTagsForResource": {
        "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "Tags": {
```

```
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>Information about the tags.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
          "TokenIds": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
```

```
            "smithy.api#documentation": "<p>Token IDs.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>LicenseArns</code>\n        </p>\n        </li>\n
</ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
      "type": "structure",
      "members": {
        "Tokens": {
          "target": "com.amazonaws.licensemanager#TokenList",
          "traits": {
            "smithy.api#documentation": "<p>Received token details.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
```

```
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
             {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying
license\n        consumption details by resource at a selected point in time. Use this action to audit the\n        current
license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
```

```
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#Filters",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n          <li>\n            <p>\n
<code>resourceArn</code> - The ARN of the license configuration resource.\n
          Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n          </li>\n
 <li>\n            <p>\n              <code>resourceType</code> - The resource type
(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n            Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n          </li>\n          <li>\n            <p>\n
    <code>resourceAccount</code> - The ID of the account that owns the resource. \n            Logical operators
are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n          </li>\n        </ul>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
          "type": "structure",
          "members": {

 "LicenseConfigurationUsageList": {
              "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
              "traits": {
                "smithy.api#documentation": "<p>Information about the license configurations.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
```

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#Location": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
        "type": "structure",
        "members": {
            "ResourceType":
{
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
                }
            },
            "AssociationCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ManagedResourceSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
        }
    },
    "com.amazonaws.licensemanager#MaxSize100": {

    "type": "integer",
        "traits": {
            "smithy.api#range": {
                "min": 1,
                "max": 100
            }
        }
    },
```

```
"com.amazonaws.licensemanager#MaxSize3StringList": {
   "type": "list",
   "member": {
      "target": "com.amazonaws.licensemanager#String"
   },
   "traits": {
      "smithy.api#length": {
         "min": 0,
         "max": 3
      }
   }
},
"com.amazonaws.licensemanager#Message": {
   "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
   "type": "structure",
   "members": {
      "Name": {
         "target": "com.amazonaws.licensemanager#String",
         "traits": {
            "smithy.api#documentation": "<p>The key name.</p>"
         }
      },

"Value": {
         "target": "com.amazonaws.licensemanager#String",
         "traits": {
            "smithy.api#documentation": "<p>The value.</p>"
         }
      }
   },
   "traits": {
      "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
   }
},
"com.amazonaws.licensemanager#MetadataList": {
   "type": "list",
   "member": {
      "target": "com.amazonaws.licensemanager#Metadata"
   }
},
"com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
   "type": "structure",
   "members": {
      "Message": {
         "target": "com.amazonaws.licensemanager#Message"
      }
```

```
        },
        "traits": {
          "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement maximum count is reached.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },
      "com.amazonaws.licensemanager#Options": {
        "type": "structure",
        "members": {
          "ActivationOverrideBehavior": {
            "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
            "traits": {
              "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter.</p>\n <ul>\n <li>\n <p>As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n </li>\n <li>\n <p>As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization.</p>\n </li>\n <li>\n <p>As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant.</p>\n </li>\n </ul>\n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n <p>Use this value to activate a grant without replacing any member accounts\n active grants for the same product.</p>\n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n <p>Use this value to activate a grant and disable other active grants in any\n member accounts
 for the same product. This action will also replace their\n previously activated grants with this activated grant.</p>\n </dd>\n </dl>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
      },
      "com.amazonaws.licensemanager#OrganizationConfiguration": {
        "type": "structure",
        "members": {
          "EnableIntegration": {
            "target": "com.amazonaws.licensemanager#Boolean",
            "traits": {
              "smithy.api#default": false,
              "smithy.api#documentation":
```

```
"<p>Enables Organizations integration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
    },
    "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 1
            }
        }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductInformationFilterList": {
                "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
                "traits": {
                    "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n          <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
<code>ProductInformationFilterComparator</code>. </p>\n          <p>The following filters and are supported when
the resource type \n          is <code>SSM_MANAGED</code>:</p>\n
          <ul>\n            <li>\n              <p>\n                <code>Application Name</code> - The name of the
application.\n              Logical operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n
<p>\n                <code>Application Publisher</code> - The publisher of the application.\n              Logical
operator is <code>EQUALS</code>.</p>\n            </li>\n            <li>\n              <p>\n
<code>Application Version</code> - The version of the application.\n              Logical operator is
<code>EQUALS</code>.</p>\n            </li>\n            <li>\n              <p>\n                <code>Platform
```

```
Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>.</p>\n
</li>\n <li>\n <p>\n <code>Platform Type</code> - The platform type.\n
Logical operator is <code>EQUALS</code>.</p>\n
</li>\n <li>\n <p>\n <code>Tag:key</code> - The key of a tag attached to an
Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is
<code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the
example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you
are not using values for the key.\n </p>\n </li>\n <li>\n <p>\n
<code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from
automated discovery.\n Logical operator is <code>NOT_EQUALS</code>.</p>\n </li>\n
<li>\n <p>\n <code>License Included</code> - The type of license included.\n Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are:
<code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-
web</code> | \n <code>windows-server-datacenter</code>.</p>\n </li>\n </ul>\n
<p>The following filters and logical operators are supported when the resource type\n is
<code>RDS</code>:</p>\n <ul>\n <li>\n <p>\n <code>Engine Edition</code> -
The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible
values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-
se2</code>.</p>\n </li>\n <li>\n <p>\n <code>License Pack</code> - The license
pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data
guard</code> | \n <code>diagnostic pack sqlt</code> | \n
<code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>.</p>\n
</li>\n </ul>",
                "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#ProductInformationFilter": {
        "type": "structure",
        "members": {
          "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Filter name.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",

          "traits": {
              "smithy.api#documentation": "<p>Filter value.</p>"
            }
          },
```

```
        "ProductInformationFilterComparator": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Logical operator.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
      }
    },
    "com.amazonaws.licensemanager#ProductInformationFilterList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
      }
    },
    "com.amazonaws.licensemanager#ProductInformationList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
       }
    },
    "com.amazonaws.licensemanager#ProvisionalConfiguration": {
      "type": "structure",
      "members": {
        "MaxTimeToLiveInMinutes": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
      }
    },
    "com.amazonaws.licensemanager#RateLimitExceededException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
```

```
            "aws.protocols#awsQueryError": {
              "code": "RateLimitExceeded",
              "httpResponseCode": 429
            },
            "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 429
          }
        },
        "com.amazonaws.licensemanager#ReceivedMetadata": {
          "type": "structure",
          "members": {
            "ReceivedStatus": {
              "target": "com.amazonaws.licensemanager#ReceivedStatus",
              "traits": {
                "smithy.api#documentation": "<p>Received status.</p>"
              }
            },
            "ReceivedStatusReason": {
              "target": "com.amazonaws.licensemanager#StatusReasonMessage",
              "traits": {
                "smithy.api#documentation": "<p>Received
 status reason.</p>"
              }
            },
            "AllowedOperations": {
              "target": "com.amazonaws.licensemanager#AllowedOperationList",
              "traits": {
                "smithy.api#documentation": "<p>Allowed operations.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
          }
        },
        "com.amazonaws.licensemanager#ReceivedStatus": {
          "type": "enum",
          "members": {
            "PENDING_WORKFLOW": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "PENDING_WORKFLOW"
              }
            },
            "PENDING_ACCEPT": {
              "target": "smithy.api#Unit",
```

```
            "traits": {
              "smithy.api#enumValue":
"PENDING_ACCEPT"
            }
          },
          "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "REJECTED"
            }
          },
          "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ACTIVE"
            }
          },
          "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
          },
          "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
          },
          "DISABLED": {
            "target": "smithy.api#Unit",
             "traits": {
              "smithy.api#enumValue": "DISABLED"
            }
          },
          "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#RedirectException": {
        "type": "structure",
        "members": {
          "Location": {
            "target": "com.amazonaws.licensemanager#Location",
```

```
            "traits": {
              "smithy.api#httpHeader": "Location"
            }
          },
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
           "smithy.api#error": "client",
          "smithy.api#httpError": 308
        }
      },
      "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}

  }
      },
      "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#RenewType":
  {
        "type": "enum",
        "members": {
```

```
            "NONE": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "None"
              }
            },
            "WEEKLY": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Weekly"
              }
            },
            "MONTHLY": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Monthly"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#ReportContext": {
          "type": "structure",
          "members": {
            "licenseConfigurationArns": {
              "target": "com.amazonaws.licensemanager#ArnList",
              "traits": {

          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this
generator reports on.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
          }
        },
        "com.amazonaws.licensemanager#ReportFrequency": {
          "type": "structure",
          "members": {
            "value": {
              "target": "com.amazonaws.licensemanager#Integer",
              "traits": {
                "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated.  \n         The only supported value is <code>1</code>.</p>"
              }
            },
            "period": {
```

```
                "target": "com.amazonaws.licensemanager#ReportFrequencyType",

                "traits": {
                    "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
or monthly.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportFrequencyType": {
        "type": "enum",
        "members": {
            "DAY": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DAY"
                }
            },
            "WEEK": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WEEK"
                }
            },
            "MONTH": {
                "target": "smithy.api#Unit",
                "traits":
{
                    "smithy.api#enumValue": "MONTH"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>"
                }
            },
            "ReportType": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
```

```
                "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
            }
        },
        "ReportContext": {
            "target": "com.amazonaws.licensemanager#ReportContext",
            "traits": {
                "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
            }
        },
        "ReportFrequency": {
            "target": "com.amazonaws.licensemanager#ReportFrequency",
            "traits": {
                "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
            }
        },
        "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
            }
        },
        "LastRunStatus": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
            }
        },
        "LastRunFailureReason":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
            }
        },
        "LastReportGenerationTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
            }
        },
        "ReportCreatorAccount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
            }
        },
```

```
            "Description": {
               "target": "com.amazonaws.licensemanager#String",

         "traits": {
                  "smithy.api#documentation": "<p>Description of the report generator.</p>"
               }
            },
            "S3Location": {
               "target": "com.amazonaws.licensemanager#S3Location",
               "traits": {
                  "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
               }
            },
            "CreateTime": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Time the report was created.</p>"
               }
            },
            "Tags": {
               "target": "com.amazonaws.licensemanager#TagList",
               "traits": {
                  "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
               }

      }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
         }
      },
      "com.amazonaws.licensemanager#ReportGeneratorList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#ReportGenerator"
         }
      },
      "com.amazonaws.licensemanager#ReportGeneratorName": {
         "type": "string",
         "traits": {
            "smithy.api#length": {
               "min": 1,
               "max": 100
            }
         }
      },
      "com.amazonaws.licensemanager#ReportType": {
```

```
      "type": "enum",
      "members": {
        "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
          }

    },
        "LICENSE_CONFIGURATION_USAGE_REPORT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "LicenseConfigurationUsageReport"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#ReportTypeList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ReportType"
      }
    },
    "com.amazonaws.licensemanager#ResourceInventory": {
      "type": "structure",
      "members": {
        "ResourceId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>ID of the resource.</p>"
          }
        },
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits":
{
            "smithy.api#documentation": "<p>Type of resource.</p>"
          }
        },
        "ResourceArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
          }
        },
        "Platform": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
```

```
                "smithy.api#documentation": "<p>Platform of the resource.</p>"
              }
            },
            "PlatformVersion": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
              }
            },
            "ResourceOwningAccountId":
{
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details about a resource.</p>"
          }
        },
        "com.amazonaws.licensemanager#ResourceInventoryList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#ResourceInventory"
          }
        },
        "com.amazonaws.licensemanager#ResourceLimitExceededException": {
          "type": "structure",
          "members": {
            "Message": {
              "target": "com.amazonaws.licensemanager#Message"
            }
          },
          "traits": {
            "aws.protocols#awsQueryError": {
              "code": "ResourceLimitExceeded",

               "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
          }
        },
        "com.amazonaws.licensemanager#ResourceNotFoundException": {
          "type": "structure",
          "members": {
```

```
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "InvalidResource.NotFound",
        "httpResponseCode": 400
      },
      "smithy.api#documentation": "<p>The resource cannot be found.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 400
    }
  },
  "com.amazonaws.licensemanager#ResourceType": {
    "type": "enum",
     "members": {
      "EC2_INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_INSTANCE"
        }
      },
      "EC2_HOST": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_HOST"
        }
      },
      "EC2_AMI": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EC2_AMI"
        }
      },
      "RDS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "RDS"
        }
      },
      "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
        "target": "smithy.api#Unit",
        "traits": {
           "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
        }
      }
    }
```

```
    },
    "com.amazonaws.licensemanager#S3Location": {
      "type": "structure",
      "members": {
        "bucket": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
          }
        },
        "keyPrefix": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
      }
    },
    "com.amazonaws.licensemanager#ServerInternalException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "InternalError",
          "httpResponseCode": 500
        },
        "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
        "smithy.api#error": "server",
        "smithy.api#httpError": 500
      }
    },
    "com.amazonaws.licensemanager#SignedToken": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 4096
        }
      }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
```

```
        "type": "string",
        "traits":
{
            "smithy.api#length": {
              "min": 0,
              "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
            "Key": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Tag key.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Tag value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#TagList": {
        "type": "list",
```

```
        "member": {
          "target": "com.amazonaws.licensemanager#Tag"
        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
          {
            "target":
 "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits":
 {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
```

```
            "traits": {
              "smithy.api#documentation": "<p>One or more tags.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
          "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token ID.</p>"
            }
          },
          "TokenType": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
            }
          },
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "ExpirationTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
 format.</p>"
            }
          },
          "TokenProperties": {
            "target": "com.amazonaws.licensemanager#MaxSize3StringList",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Data specified by the caller.</p>"
            }
          },
          "RoleArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
            }
          }
        },
        "traits": {

          "smithy.api#documentation": "<p>Describes a token.</p>"
        }
      },
      "com.amazonaws.licensemanager#TokenList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#TokenData"
        }
      },
      "com.amazonaws.licensemanager#TokenString": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 4096
          },
          "smithy.api#pattern": "^\\S+$"
        }
      },
      "com.amazonaws.licensemanager#TokenType": {
        "type": "enum",
        "members": {
          "REFRESH_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "REFRESH_TOKEN"
            }
```

```
            }
        }
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
```

```
    "com.amazonaws.licensemanager#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
             "smithy.api#required": {}
          }
        },
        "TagKeys": {
          "target": "com.amazonaws.licensemanager#TagKeyList",
          "traits": {
            "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#UntagResourceResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
      },
      "output": {

 "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

```
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
          "type": "structure",
          "members": {
            "LicenseConfigurationArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                "smithy.api#required": {}
              }
            },
            "LicenseConfigurationStatus": {
              "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
              "traits": {
                "smithy.api#documentation": "<p>New status of the license configuration.</p>"
              }
            },
            "LicenseRules": {
              "target": "com.amazonaws.licensemanager#StringList",
              "traits": {

    "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
    configuration is licenseAffinityToHost.</p>"
              }
            },
            "LicenseCount": {
              "target": "com.amazonaws.licensemanager#BoxLong",
              "traits": {
                "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
              }
            },
            "LicenseCountHardLimit": {
```

```
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
            }
          },
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>New name
 of the license configuration.</p>"
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>New description of the license configuration.</p>"
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>New product information.</p>"
            }
          },
          "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
          }
        },
        "traits":
 {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n        <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportGeneratorName": {
```

```
            "target": "com.amazonaws.licensemanager#ReportGeneratorName",
            "traits": {
              "smithy.api#documentation": "<p>Name of the report generator.</p>",
              "smithy.api#required": {}
            }
          },
          "Type": {
            "target": "com.amazonaws.licensemanager#ReportTypeList",
            "traits": {
              "smithy.api#documentation":
 "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n        <li>\n
<p>License configuration report - Reports the number and details of consumed licenses for a license
configuration.</p>\n        </li>\n        <li>\n        <p>Resource report - Reports the tracked licenses and
resource consumption for a license configuration.</p>\n        </li>\n        </ul>",
              "smithy.api#required": {}
            }
          },
          "ReportContext": {
            "target": "com.amazonaws.licensemanager#ReportContext",
            "traits": {
              "smithy.api#documentation": "<p>The report context.</p>",
              "smithy.api#required": {}
            }
          },
          "ReportFrequency": {
            "target": "com.amazonaws.licensemanager#ReportFrequency",
            "traits":
 {
              "smithy.api#documentation": "<p>Frequency by which reports are generated.</p>",
              "smithy.api#required": {}
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientRequestToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
          }
        },
        "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n          <p>You can update the license specifications of AMIs, instances, and
hosts.\n          You cannot update the license specifications for launch templates and CloudFormation templates, \n
 as they send license configurations to the operation that creates the resource.</p>"
```

```
        }
      },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
            "smithy.api#required": {}
          }
        },
        "AddLicenseSpecifications": {
          "target": "com.amazonaws.licensemanager#LicenseSpecifications",
          "traits": {
            "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
          }
        },
        "RemoveLicenseSpecifications": {
          "target": "com.amazonaws.licensemanager#LicenseSpecifications",
          "traits": {
            "smithy.api#documentation":
 "<p>ARNs of the license configurations to remove.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
      },
      "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where
the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used
for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account
discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
```

```
                "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"

            }
                }
            },
            "traits": {
                "smithy.api#input": {}
            }
        },
        "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
            "type": "structure",
            "members": {},
            "traits": {
                "smithy.api#output": {}
            }
        },
        "com.amazonaws.licensemanager#UsageOperation": {
            "type": "string",
            "traits": {
                "smithy.api#length": {
                    "min": 0,
                    "max": 50
                }
            }
        },
        "com.amazonaws.licensemanager#ValidationException": {
            "type": "structure",
            "members": {
                "Message": {
                    "target": "com.amazonaws.licensemanager#Message"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

        "smithy.api#error": "client",
                "smithy.api#httpError": 400
            }
        }
    }
}
CheckoutLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
```

```
 spanInitializeEnd
Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 Retry
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
```

1.123 confluentinc-confluent-kafka-go 2.10.0

1.123.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
```

```
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string
```

```
 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
 return err
 }
 if err = addRetry(stack, options); err != nil {
 return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
 return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
```

```
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
```

```
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }} ${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
      uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi
ListLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
```

```
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 Retry
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
```

```
 return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string
```

```
 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if
err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err
 = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err
 = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType
```

```
 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
```

```
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
```

```
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
```

```
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
```

```
 return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}
```

```
func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
```

```
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
```

AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer

```
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager
```

```
import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
```

```
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "GetLicense",
 }
}
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
```

```
 spanRetryLoop
 Retry
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
```

```
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
```

```
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
if err != nil {
 return
err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
```

```
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
```

```
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
   "smithy": "2.0",
```

```
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own
License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
           "traits": {
             "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider
```

```
resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of name to filter by.</p>"
                 }
            },
            "Values": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
                }
            },
            "Operator": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
                "traits": {
                    "smithy.api#documentation": "<p>An operator for filtering results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
           },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetRegisteredSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
              "smithy.api#required": {}
            }
          }
        },
```

```
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

          "traits": {
                    "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
                 }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved
subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetServiceSettings"

          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has been enabled, and which Regions data will be aggregated from.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
              }
            },
            "StatusMessage": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
              "traits": {
                "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
              }
            },
            "HomeRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
               "traits": {
                "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated data for Linux\n      subscriptions.</p>"
              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
          "type": "structure",
          "members": {
            "AmiId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
              }
            },
            "InstanceID": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
              }
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```
        },
        "InstanceType": {
          "target": "smithy.api#String",
          "traits":
{
            "smithy.api#documentation": "<p>The instance type of the resource.</p>"
          }
        },
        "AccountID": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of the instance.</p>"
          }
        },
        "Region": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
          }
        },
        "UsageOperation": {
          "target": "smithy.api#String",

   "traits": {
            "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
          }
        },
        "ProductCode": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
          "traits": {
            "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
          }
        },
        "LastUpdatedTime": {
          "target": "smithy.api#String",
           "traits": {
            "smithy.api#documentation": "<p>The time in which the last discovery updated the instance
```

details. "
                }
            },
            "SubscriptionName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": " The name of the license subscription that the instance uses. "
                }
            },
            "OsVersion": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": " The operating system software version that runs on your
instance. "
                }
            },
            "SubscriptionProviderCreateTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": " The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses. "
                }
            },
            "SubscriptionProviderUpdateTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": " The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider. "
                }
            },
            "DualSubscription": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": " Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance. "
                }
            },
            "RegisteredWithSubscriptionProvider": {
                "target": "smithy.api#String",
                "traits": {

    "smithy.api#documentation": " Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager. "
                }
            }
        },
        "traits": {
            "smithy.api#documentation": " Details discovered information about a running instance using Linux

```
subscriptions.</p>"
            }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
            "type": "list",
            "member": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
            }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
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            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
                "smithy.api#error": "server"
            }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
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                },
                {
                    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
                },
                {
                    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
                },
                {
                    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
                },
                {
                    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
                 },
                {
                    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
                },
                {
                    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
                },
                {
```

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            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
          }
        ],
        "traits": {
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            "sdkId": "License Manager Linux Subscriptions",
             "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
          },
          "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
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          "aws.protocols#restJson1": {},
          "smithy.api#cors": {
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              "content-type",
              "x-amz-content-sha256",
              "x-amz-user-agent",
              "x-amzn-platform-id",
              "x-amzn-trace-id"
            ],
            "additionalExposedHeaders": [
              "x-amzn-errortype",
              "x-amzn-requestid",
              "x-amzn-trace-id"
            ]
          },
          "smithy.api#documentation": "<p>With License Manager,
    you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
          "smithy.api#title": "AWS License Manager Linux Subscriptions",
          "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
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                "builtIn": "AWS::Region",
                "required": false,
                "documentation": "The AWS region used to dispatch the request.",
                "type": "String"
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        "UseDualStack": {
          "builtIn": "AWS::UseDualStack",
          "required": true,
          "default": false,
          "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
           "type": "Boolean"
        },
        "UseFIPS": {
          "builtIn": "AWS::UseFIPS",
          "required": true,
          "default": false,
          "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
          "type": "Boolean"
        },
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          "required": false,
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          "type": "String"
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                }
              ]
            }
          ],
          "rules": [
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              "conditions": [
                {
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                  "argv": [
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                      "ref": "UseFIPS"
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```
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                "conditions": [],
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                                    },
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}
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            ],
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                    "conditions": [
                        {
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                        "argv": [
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                        "argv": [
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                          },
                          true
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                    "argv": [
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                        "argv": [
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},
                          "supportsFIPS"
                        ]
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                    ]
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                    "argv": [
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                      {
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                        "argv": [

                         {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }
                    ]
                  }
                ],
                "rules": [
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                    "conditions": [],

    "rules": [
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                          "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                          "properties": {},
                          "headers": {}
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                        "type": "endpoint"
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```
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one or both",
                            "type": "error"
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                                },
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                                {

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                                            "fn": "getAttr",
                                            "argv": [
                                                {
                                                    "ref": "PartitionResult"
                                                },
                                                "supportsFIPS"
                                            ]
                                        },
                                        true
```

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                                    ]
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                            "type": "tree"
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                            "conditions": [],
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 but this partition does not support FIPS",
                            "type": "error"
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                            "argv": [
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                                },
                                true

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                    "argv": [
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                        "fn": "getAttr",
                        "argv": [
                          {

                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }
                    ]
                  }
                ],
                "rules": [
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                    "conditions": [],
                    "rules": [

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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
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                            "headers": {}
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                          "type": "endpoint"
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                      "type": "tree"

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              },
              {
                "conditions": [],
                "error": "DualStack is enabled but this partition does not support DualStack",
                "type": "error"
              }
            ],
            "type": "tree"
          },
```

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                                {
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
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                                                "headers": {}
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                        }
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                    "error": "Invalid Configuration: Missing Region",
                    "type": "error"
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            "type": "tree"
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"smithy.rules#endpointTests": {
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            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
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      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
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        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {

   "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
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        "endpoint": {
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        }
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      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
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    },
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      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
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        }

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      "params": {
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        "UseFIPS": false,
        "UseDualStack": false
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    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
        }
```

```
      },
      "params": {
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        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {

"documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
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        }
      },
      "params": {
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        "UseFIPS": true,
        "UseDualStack": false
      }
    },
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      "expect": {
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        "UseDualStack": true
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        }
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      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
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                      "UseDualStack": true
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                      }

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                    },
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      },
      "params": {

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        "UseDualStack": true
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    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
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      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
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        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
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      "expect": {
        "endpoint": {
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```

```
            }
          },
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            "UseDualStack": false
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            "UseDualStack": true
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          "expect": {
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             }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
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        },
        {
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          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
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          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
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            "endpoint": {
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            }
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          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
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          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
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            }

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          "params": {
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            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
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            }
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            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
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          "expect": {
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
          },
          "params": {
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            "UseFIPS": true,
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                "expect": {
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {

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                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                }
            },
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                "documentation": "Missing region",
                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
            }
        ],
        "version": "1.0"
      }
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
    "type": "string",
    "traits": {
      "smithy.api#enum": [
        {
          "name": "Enabled",
          "value": "Enabled",
          "documentation": "Enabled LinuxSubscriptionsDiscovery"

   },
        {
          "name": "Disabled",
          "value": "Disabled",
          "documentation": "Disabled LinuxSubscriptionsDiscovery"
        }
      ]
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
    "type": "structure",
```

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        "members": {
          "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
              "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },

  {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
```

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            "uri": "/subscription/ListLinuxSubscriptionInstances"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "Instances"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
{
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n          <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n          <ul>\n          <li>\n
  <p>\n              <code>AccountID</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
    <code>AmiID</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>DualSubscription</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>InstanceID</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>InstanceType</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>ProductCode</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Region</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Status</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>UsageOperation</code>\n            </p>\n          </li>\n        </ul>\n        <p>For each filter, you can use
one of the following <code>Operator</code>
 values to \n  \t\tdefine the behavior of the filter:</p>\n        <ul>\n          <li>\n            <p>\n
<code>contains</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>equals</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>A token to specify where to
 start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                "smithy.api#length": {
                  "min": 1,
                  "max": 16384
                }
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
          "type": "structure",
          "members": {
            "Instances": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
              "traits": {
                "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
              }
            },
            "NextToken": {

           "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",

   "items": "Subscriptions"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n        <p>The valid names for this filter are:</p>\n        <ul>\n <li>\n            <p>\n                <code>Subscription</code>\n            </p>\n        </li>\n        </ul>\n <p>The
 valid Operators for this filter are:</p>\n        <ul>\n          <li>\n            <p>\n <code>contains</code>\n            </p>\n          </li>\n          <li>\n            <p>\n <code>equals</code>\n            </p>\n          </li>\n          <li>\n            <p>\n <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
                }
            },
```

```
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                     "min": 1,
                     "max": 16384
                  }
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
         "type": "structure",
         "members": {
            "Subscriptions": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
               "traits": {
                  "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
               }
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
         "type": "operation",
         "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
         },
         "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
         },
         "errors": [
            {
```

```
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "RegisteredSubscriptionProviders"
            }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
                "traits": {
                    "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to return \n\t\t\tin the list.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
                    }
                }
```

```
  },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
          "RegisteredSubscriptionProviders": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
            }
          },

           "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {
```

```
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
```

```
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
                },
                {
                    "name": "CONTAINS",
                    "value": "Contains",
                    "documentation": "Contains operator"
                }
            ],
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
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```
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/RegisterSubscriptionProvider"

          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
              "smithy.api#required": {}
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                "smithy.api#required": {}
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
          "type": "structure",
          "members": {
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
              "traits": {
                "smithy.api#documentation": "<p>The Linux subscription provider that you registered.</p>"
              }
            },
            "SubscriptionProviderArn": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription provider resource that you registered.</p>"
              }
            },
            "SubscriptionProviderStatus": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux subscription provider \n\t\t\tthat you requested.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
```

```
{
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

  }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
```

```
            {
              "name": "Successful",
              "value": "Successful",
              "documentation": "Successful status"
            },
            {
              "name": "Failed",
              "value": "Failed",
              "documentation": "Failed status"
            }
          ]
        }
      },

      "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#length": {
              "min": 1,
              "max": 100
            }
          }
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          },
          "smithy.api#uniqueItems": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
          "Name":
{
            "target": "smithy.api#String",
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```
            "traits": {
              "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
          },
          "Type": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
            }
          },
          "InstanceCount": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [

 {
            "name": "RedHat",
            "value": "RedHat",
            "documentation": "RedHat subscription provider namespace"
          }
```

```
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "ACTIVE",
            "value": "ACTIVE",
            "documentation": "ACTIVE status"
          },
          {
            "name": "INVALID",
            "value": "INVALID",

"documentation": "INVALID status"
          },
          {
            "name": "PENDING",
            "value": "PENDING",
            "documentation": "PENDING status"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
      "type": "operation",
      "input": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
{
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
```

```
      "traits": {
        "smithy.api#input": {}
      }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
      "type": "map",
      "key": {
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation":
"<p>The request was denied due to request throttling.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
           "smithy.api#http": {
            "method": "DELETE",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tagKeys": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
            "traits": {

           "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
              "smithy.api#httpQuery": "tagKeys",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
```

```
    "members": {},
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

   },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/subscription/UpdateServiceSettings"
      },
      "smithy.api#idempotent": {}
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
       "LinuxSubscriptionsDiscovery": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
        "traits": {
          "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
          "smithy.api#required": {}
        }
      },
      "LinuxSubscriptionsDiscoverySettings": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
        "traits": {
```

```
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowUpdate": {
              "target": "smithy.api#Boolean",
              "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home Region.</p>"
              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
          "type": "structure",
          "members": {
            "LinuxSubscriptionsDiscovery": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
              "traits": {
                "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
              }
            },
            "LinuxSubscriptionsDiscoverySettings": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
              "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
              }
            },
            "StatusMessage": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
              "traits": {
                "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
              }
```

```
        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
          "smithy.api#error": "client"
        }
      }
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
```

```
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {
```

```
// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
```

```
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
```

```
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
GetLicense
 Initialize stack step
  spanInitializeStart
```

RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
```

details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration. "
            }
          },
          "ActiveDirectoryType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
            "traits": {
              "smithy.api#documentation": " The type of Active Directory either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory. "
            }
          }
        },
        "traits": {
          "smithy.api#documentation": " Details about an Active Directory identity provider. "
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
          "DomainName": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " The domain name for the Active Directory. "
            }
          },
          "DomainIpv4List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
            "traits": {
              "smithy.api#documentation": " A list of domain IPv4 addresses that are used for the Active Directory. ",
              "smithy.api#length": {
                "min": 1,
                "max": 2
              }
            }
          },
          "DomainCredentialsProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": " Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration. "
            }
          },
          "DomainNetworkSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
            "traits": {

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                "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "SELF_MANAGED",
              "value": "SELF_MANAGED",
              "documentation": "SELF_MANAGED type of Active Directory"
            },
            {
              "name": "AWS_MANAGED",
              "value": "AWS_MANAGED",
              "documentation": "AWS_MANAGED type of Active Directory"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
```

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            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n         <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http":
 {
               "code": 200,
               "method": "POST",
               "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
```

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                "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                "smithy.api#required": {}
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
              }
            }
          },
          "traits": {

        "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
          "type": "integer"
```

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    },
    "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
         }
      },
      "traits": {
        "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
        "smithy.api#error": "server"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },

       {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS)
```

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license server.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
          "type": "structure",
          "members": {
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
                "smithy.api#required": {}
              }
            },
            "LicenseServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for
the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                "smithy.api#required": {}
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
          "type": "structure",
          "members": {
            "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
```

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            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider specified in the request.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code> resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
          "SecretsManagerCredentialsProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user \n\t\t\tadministration.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
```

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            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
         ],
         "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
         "type": "structure",
         "members": {
            "LicenseServerEndpointArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                  "smithy.api#required": {}
               }
            },
             "ServerType": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
               "traits": {
                  "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
```

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            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
```

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderSummary": {
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            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}

    }
     },
     "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
     },
     "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
```

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            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity provider.</p>"
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
```

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                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to disassociate.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory domain.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },

   "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
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            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
            },
            "Operation": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
                }
            },
            "Value": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
            "ActiveDirectoryIdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
                 "traits": {
                    "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
```

```
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the
registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC
endpoints.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
                }
            },
            "FailureMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
                }
            }
        },
        "traits": {
```

```
            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
          "type": "list",
          "member": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
          "type": "structure",
          "members": {
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "Status": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                "smithy.api#required": {}
              }
            },
            "Products": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
               "traits": {
                "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                "smithy.api#required": {}
              }
            },
            "LastStatusCheckDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The date of the last status check.</p>"
              }
            },
            "StatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
              }
            }
          },
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        "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },

    "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
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```
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance user.</p>"
              }
            },
            "StatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
              }
            },
            "AssociationDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
              }
            },
            "DisassociationDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
            }
          },
```

```
    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
         "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
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"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
         },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
```

```
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",
```

```
          "x-api-key",
                "authorization",
                "x-amz-date",
                "x-amz-security-token",
                "Access-Control-Allow-Headers",
                "Access-Control-Allow-Methods",
                "Access-Control-Allow-Origin"
            ],
            "additionalExposedHeaders": [
                "x-amzn-errortype",
                "x-amzn-requestid",
                "x-amzn-trace-id"
            ]
          },
          "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
          "smithy.api#title": "AWS License Manager User Subscriptions",
          "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
              "Region":
{
                "builtIn": "AWS::Region",
                "required": false,
                "documentation": "The AWS region used to dispatch the request.",
                "type": "String"
              },
              "UseDualStack": {
                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                "type": "Boolean"
              },
              "UseFIPS": {
                "builtIn": "AWS::UseFIPS",
                "required": true,
                "default": false,
                "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                "type": "Boolean"
              },
              "Endpoint": {
                "builtIn": "SDK::Endpoint",
                "required": false,
                "documentation": "Override the endpoint used to send this request",
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      "type": "String"
    }
  },
  "rules": [
    {
      "conditions": [
        {
          "fn": "isSet",
          "argv": [
            {
              "ref": "Endpoint"
            }
          ]
        }
      ],
      "rules": [
        {
          "conditions": [
            {
              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseFIPS"
                },
                true
              ]
            }
          ],
          "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
          "type": "error"
        },
        {
          "conditions": [
            {

              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseDualStack"
                },
                true
              ]
            }
          ],
          "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
          "type": "error"
        },
        {
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                    "ref": "Endpoint"
                  },

"properties": {},
                    "headers": {}
                },
                "type": "endpoint"
              }
            ],
            "type": "tree"
          },
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "aws.partition",

                   "argv": [
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseFIPS"
                          },
```

```
true
                ]
              },
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

"fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  },

                {
                    "fn": "booleanEquals",
                    "argv": [
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                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]
                      }
```

```
                ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }

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                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                "type": "error"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "booleanEquals",
                "argv": [

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                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "fn": "getAttr",
```

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                    "argv": [

                {
                            "ref": "PartitionResult"
                        },
                        "supportsFIPS"
                    ]
                },
                true
            ]
        }
    ],
    "rules": [
        {
            "conditions": [],
            "endpoint": {

        "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                "properties": {},
                "headers": {}
            },
            "type": "endpoint"
        }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "error": "FIPS is enabled but this partition does not support FIPS",
    "type": "error"

}
        ],
        "type": "tree"
    },
    {
        "conditions": [
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                "fn": "booleanEquals",
                "argv": [
                    {
                        "ref": "UseDualStack"
                    },
                    true
                ]
            }
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        "rules": [
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```
                {

        "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {
                              "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                          ]

    }
                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {
                        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }

                ],
                    "type": "tree"
                },
                {
                  "conditions": [],
                  "error": "DualStack is enabled but this partition does not support DualStack",
                  "type": "error"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [],
              "endpoint": {
                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
```

```
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                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
            }
        ],
        "type": "tree"
      },
      {
        "conditions": [],
        "error": "Invalid Configuration: Missing Region",
        "type": "error"
      }
    ]
  },
  "smithy.rules#endpointTests": {
    "testCases": [
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
        "expect":
{
          "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-east-1",

    "UseFIPS": true,
          "UseDualStack": false
        }
```

```
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
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        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS":
 true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
```

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            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
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                {
                  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
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{
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                    }
                  },
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                    "UseFIPS": true,
                    "UseDualStack": false
                  }
                },
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                    }
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                    "Region": "us-gov-east-1",
                    "UseFIPS": false,
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                  }
                },
                {
                  "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
                    }
                  },
                  "params": {
                    "Region": "us-gov-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
                  "expect": {
                    "error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
                  },
                  "params": {
                    "Region": "us-iso-east-1",
```

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            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false

}
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
            }

      },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
```

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        "UseFIPS": true,
        "UseDualStack": true
      }
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    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-isob-east-1",

 "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {
```

```
      "endpoint": {
            "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack":
false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
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                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "Missing region",
                  "expect": {
                    "error": "Invalid Configuration: Missing Region"
                  }
                }
              ],
              "version": "1.0"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
          "type": "structure",
          "members": {
            "ProvisioningStatus": {
              "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
               "traits": {
                 "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
              }
            },
            "HealthStatus": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
              "traits": {
                "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
              }
            },
            "Ipv4Address": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Information
 about a Remote Desktop Services (RDS) license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
          "type": "structure",
          "members": {
```

```
            "IdentityProviderArn": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
               }
            },
            "ServerType": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
               "traits": {
                  "smithy.api#documentation": "<p>The type of license server.</p>"
               }
            },
            "ServerEndpoint": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

   "traits": {
                  "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
               }
            },
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
               }
            },
            "LicenseServerEndpointId": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
               }
            },
            "LicenseServerEndpointArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits":
{
                  "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
               }
            },
            "LicenseServerEndpointProvisioningStatus": {
               "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
               "traits": {
                  "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
```

```
            }
          },
          "LicenseServers": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
            }
          },

         "CreationTime": {
            "target": "smithy.api#Timestamp",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp when License Manager created the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

  "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "PROVISIONING",
              "value": "PROVISIONING",
              "documentation": ""
            },
            {
              "name": "PROVISIONING_FAILED",
              "value": "PROVISIONING_FAILED",
              "documentation": ""
            },
            {
```

```
            "name": "PROVISIONED",
            "value": "PROVISIONED",
            "documentation": ""
          },
          {
            "name": "DELETING",
            "value": "DELETING",
            "documentation": ""
          },
          {
            "name": "DELETION_FAILED",
            "value": "DELETION_FAILED",
            "documentation": ""

          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
      }
    },
     "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
      "type": "list",
      "member": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
          "type": "structure",
          "members": {
            "ServerType": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
              "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>",
                "smithy.api#required": {}
              }
            },
            "ServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {

            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
```

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use
 the following filters to streamline results:</p>\n        <ul>\n            <li>\n                <p>Product</p>\n            </li>\n
        <li>\n                <p>DirectoryId</p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
```

```
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummaries": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

            "traits": {
                "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
                "smithy.api#required": {}
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
          "type": "operation",
           "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },

      {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "InstanceSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
         "type": "structure",
         "members":
 {
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
```

```
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n
        <li>\n            <p>InstanceId</p>\n          </li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next
 token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
```

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        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },

          "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                    "smithy.api#range": {
                        "min": 1,
                        "max": 100
```

```
                }
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>IdentityProviderArn</p>\n            </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
          "type": "structure",
          "members": {
            "LicenseServerEndpoints": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
              "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
          "type":
```

```
 "operation",
        "input": {
           "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
           "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
           {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
           },
           {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
           },
           {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
           },
           {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
           },
           {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
           {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
           },
           {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
           }
        ],
        "traits": {
           "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
           "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/ListProductSubscriptions"
           },
           "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "ProductUserSummaries"
           }
        }
     },
     "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
```

```
{
        "type": "structure",
        "members": {
           "Product": {
              "target": "smithy.api#String",
              "traits": {
                 "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
              }
           },
           "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                 "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                 "smithy.api#required": {}
              }
           },
           "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                 "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
           },
           "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                 "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n             <p>Status</p>\n          </li>\n          <li>\n             <p>Username</p>\n
</li>\n          <li>\n             <p>Domain</p>\n          </li>\n       </ul>"
              }
           },
           "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                 "smithy.api#documentation": "<p>A token to specify where to start paginating.
 This is the nextToken \n\tfrom a previously truncated response.</p>"
              }
           }
        },
        "traits": {
           "smithy.api#input": {}
        }
     },
     "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
```

```
        "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service
 hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#readonly": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}

          }
        }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
             }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "InstanceUserSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
         "type": "structure",
         "members": {
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance, which
provides user-based subscriptions.</p>",
                  "smithy.api#required": {}
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                  "smithy.api#required": {}
```

```
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {

    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n        <ul>\n
  <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n          </li>\n
<li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummaries": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
```

```
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username":
{
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
           "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
```

```
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {

          "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
            }
          },
          "SubscriptionStartDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The start date of a subscription.</p>"
            }
          },
          "SubscriptionEndDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The end date of a subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
          "RdsSalCredentialsProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
```

```
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
```

```
        "type": "structure",
        "members": {
          "IdentityProvider": {

    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits":
 {
              "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation":
```

```
"<p>Metadata that describes the results of an identity provider operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",

   "smithy.api#error": "client",
            "smithy.api#httpError": 404
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
            "SecretId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                    "smithy.api#length": {
                        "min": 1
                    }
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
      "type": "string",
      "traits": {
        "smithy.api#length": {

         "min": 5,
          "max": 200
        },
        "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
      "type": "structure",
      "members": {
        "Endpoint": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
      "type": "union",
      "members": {
        "RdsSalSettings": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
           "traits": {
            "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "RDS_SAL",
            "value": "RDS_SAL",
```

```
                "documentation": ""
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
          "type": "structure",
          "members": {
            "message": {

  "target": "smithy.api#String"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Settings": {
          "type": "structure",
          "members": {
            "Subnets": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
              "traits": {
                "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                "smithy.api#length": {
                  "min": 1
                },
                "smithy.api#required": {}
              }
            },
            "SecurityGroupId": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

             "traits": {
                "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
          }
        },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

      },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/user/StartProductSubscription"
        }

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
```

```
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {

 "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n          <p>Valid values:
<code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n
</p>",
              "smithy.api#required": {}
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }

 }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
```

```
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

    },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

    },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
```

```
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/StopProductSubscription"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
         "type": "structure",
         "members": {
            "Username": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
               }
            },
            "IdentityProvider": {
               "target":
 "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
               }
            },
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "ProductUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"

               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
               }
            }
```

```
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }

  }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
```

```
 "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
 "<p>Adds tags to a resource.</p>",
            "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "Tags": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation":
"<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
          "smithy.api#error": "client"
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {

       "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
        "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}

      }
        },
        "TagKeys": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
          "traits": {
            "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
            "smithy.api#httpQuery": "tagKeys",
            "smithy.api#required": {}
          }
        }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {

     "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
```

```
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },

          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
            }
          },
          "UpdateSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
            "traits": {
              "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n          <li>\n            <p>Subnets which you want to add to provision VPC endpoints.</p>\n          </li>\n
      <li>\n            <p>Subnets which you want to remove the VPC endpoints from.</p>\n          </li>\n
<li>\n            <p>Security
 group ID which permits traffic to the VPC endpoints.</p>\n          </li>\n        </ul>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#required": {}
            }
          }
        },
```

```
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
        "type": "structure",
        "members": {
            "AddSubnets": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
                    "smithy.api#required": {}
                }
            },
            "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that
 allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for
activation servers.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
```

```
    }
  }
}
```

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ListReceivedLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity

```
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
```

```
//
// This member is required.
LicenseConsumptionToken *string

// License beneficiary.
Beneficiary *string

noSmithyDocumentSerde
}

type
CheckInLicenseOutput struct {
// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
 return err
 }
 if err = addRetry(stack, options); err != nil {
 return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
 return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
```

```
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
{
  "smithy": "2.0",
  "metadata": {
      "suppressions": [
          {
              "id": "HttpMethodSemantics",
              "namespace": "*"
          },
          {
              "id": "HttpResponseCodeSemantics",
              "namespace": "*"
          },
```

```
        {
          "id": "PaginatedTrait",
          "namespace": "*"
        },
        {
          "id": "HttpHeaderTrait",
          "namespace": "*"
        },
        {
          "id": "HttpUriConflict",
          "namespace": "*"
        },
        {
          "id": "Service",
          "namespace": "*"
        }
      ]
    },
    "shapes": {
      "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
          {
            "target": "com.amazonaws.licensemanager#AcceptGrant"
          },

     {
            "target": "com.amazonaws.licensemanager#CheckInLicense"
          },
          {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
          },
          {
            "target": "com.amazonaws.licensemanager#CheckoutLicense"
          },
          {
            "target": "com.amazonaws.licensemanager#CreateGrant"
          },
          {
            "target": "com.amazonaws.licensemanager#CreateGrantVersion"
          },
          {
            "target": "com.amazonaws.licensemanager#CreateLicense"
          },
          {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
          },
```

```
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
     },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateToken"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
```

```
},
{
   "target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
   "target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
   "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
 },
{
   "target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
   "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenses"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

  "target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
   "target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
   "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
   "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
},
{
   "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
},
{
```

```
            "target": "com.amazonaws.licensemanager#ListResourceInventory"
          },
          {
            "target": "com.amazonaws.licensemanager#ListTagsForResource"
          },
          {
            "target": "com.amazonaws.licensemanager#ListTokens"
          },
          {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
          },
          {
            "target": "com.amazonaws.licensemanager#RejectGrant"
          },
          {
            "target": "com.amazonaws.licensemanager#TagResource"
          },
          {
            "target": "com.amazonaws.licensemanager#UntagResource"
          },
          {
            "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
          },
          {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
          },
          {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
          },
          {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
          }
        ],
        "traits": {
          "aws.api#service": {
            "sdkId": "License Manager",
            "arnNamespace": "license-manager",
            "cloudFormationName": "LicenseManager",
            "cloudTrailEventSource": "licensemanager.amazonaws.com",
            "endpointPrefix": "license-manager"
          },
          "aws.auth#sigv4": {
            "name": "license-manager"
          },
          "aws.protocols#awsJson1_1": {},
          "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software vendors across multiple \n          Amazon Web Services accounts and on-premises servers.</p>",
          "smithy.api#title": "AWS License Manager",
```

```
        "smithy.api#xmlNamespace": {
          "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
        },
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send
 this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant
endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
                    }
                  ]
```

```
        }
        ],
        "type": "tree",
        "rules": [
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }
            ],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
          },
          {

"conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
          },
          {
            "conditions": [],
            "endpoint": {
              "url": {
                "ref": "Endpoint"
              },
              "properties": {},
              "headers": {}
            },
            "type": "endpoint"
          }
        ]
      },
```

```
                {
                  "conditions": [
                    {
                      "fn": "isSet",
                      "argv": [
                        {
                          "ref": "Region"
                        }
                      ]
                    }
                  ],
                  "type": "tree",
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "aws.partition",
                          "argv": [
                            {
                              "ref": "Region"
                            }
                          ],
                          "assign": "PartitionResult"
                        }
                      ],
                      "type": "tree",
                      "rules": [
                        {
                          "conditions": [
                            {
                              "fn": "booleanEquals",
                              "argv": [
                                {
                                  "ref":
"UseFIPS"
                                },
                                true
                              ]
                            },
                            {
                              "fn": "booleanEquals",
                              "argv": [
                                {
                                  "ref": "UseDualStack"
                                },
                                true
                              ]
                            }
```

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                    "conditions": [
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                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },
                              "supportsFIPS"
                            ]

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                    },
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                      "argv": [
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                        {
                          "fn": "getAttr",
                          "argv": [
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                              "ref": "PartitionResult"
                            },

  "supportsDualStack"
                          ]
                        }
                      ]
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                        "properties": {},
                        "headers": {}
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            {
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both",
              "type": "error"
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                },
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                  "argv": [
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      {
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                      "argv": [
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                          "ref": "PartitionResult"
                        },
                        "supportsFIPS"
                      ]
                    }
                  ]
                }
              ],
              "type": "tree",
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                      "headers": {}
                    },
                    "type": "endpoint"
                  }
                ]
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              {
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partition does not support FIPS",
                "type": "error"
              }
            ]
          },
          {
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                "argv": [
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                  },
                  true
                ]
              }
            ],
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                "conditions": [
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                    "argv": [
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                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
```

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"supportsDualStack"
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                                      }
                                    ]
                                  }
                                ],
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                                "rules": [
                                  {
                                    "conditions": [],
                                    "endpoint": {
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manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                      "properties": {},
                                      "headers": {}

                                  },
                                    "type": "endpoint"
                                  }
                                ]
                              },
                              {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
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                            ]
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                            "conditions": [],
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                              "headers": {}
                            },
                            "type": "endpoint"
                          }
                        ]
                      }
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                  },
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                    "error": "Invalid Configuration: Missing Region",
                    "type": "error"
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              "expect": {
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{
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                }
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              "params": {
                "Region": "af-south-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
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              "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.ap-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "ap-east-1",
                "UseFIPS": false,
                "UseDualStack": false
               }
            },
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              "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.ap-northeast-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "ap-northeast-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
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              "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.ap-northeast-2.amazonaws.com"
```

```
            }
          },
          "params": {
            "Region": "ap-northeast-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
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        {
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            }
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          "params": {
            "Region": "ap-northeast-3",
            "UseFIPS": false,
            "UseDualStack": false
          }

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            }
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          "params": {
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            "UseFIPS": false,
            "UseDualStack": false
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          "expect": {
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          "params": {
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            "UseFIPS": false,
            "UseDualStack": false
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```

```
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      "params": {
        "Region": "ap-southeast-2",
        "UseFIPS": false,
        "UseDualStack": false
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    },
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"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
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        }
      },
      "params": {
        "Region": "ap-southeast-3",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
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        }
      },

     "params": {
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        "UseFIPS": false,
        "UseDualStack": false
      }
    },
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      "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
      "expect": {
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          "url": "https://license-manager.eu-central-1.amazonaws.com"
        }
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```
      },
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        "UseFIPS": false,
        "UseDualStack": false
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disabled and DualStack disabled",
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        }
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        "UseDualStack": false
      }
    },
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      "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
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        }
      },
      "params": {
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"eu-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
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          "url": "https://license-manager.eu-west-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-west-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
```

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    {
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      "expect": {

      "endpoint": {
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      },
      "params": {
        "Region": "eu-west-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
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      "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-west-3.amazonaws.com"
        }
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      "params": {
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        "UseFIPS": false,

"UseDualStack": false
      }
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      "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
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          "url": "https://license-manager.me-south-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "me-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
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      "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
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         }
      },
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        "UseFIPS": false,
        "UseDualStack": false
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      "params": {
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        "UseFIPS": false,
        "UseDualStack": false
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      "expect": {
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        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
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      "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-east-2.amazonaws.com"
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      "params": {
        "Region": "us-east-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
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      "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
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      },
      "params": {
        "Region": "us-east-2",
        "UseFIPS": true,
        "UseDualStack": false
      }
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      "documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
      "expect": {
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          "url": "https://license-manager.us-west-1.amazonaws.com"
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      "params": {
        "Region": "us-west-1",
        "UseFIPS": false,
        "UseDualStack": false
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    },
    {
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          "url": "https://license-manager-fips.us-west-1.amazonaws.com"
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      "params": {

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        "UseDualStack": false
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      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-west-2.amazonaws.com"
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      },
      "params": {
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            "UseDualStack": false
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          "params": {
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            "UseFIPS": true,
            "UseDualStack": false
          }
        },
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          "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,

            "UseDualStack": true
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        },
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          "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
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                    "url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
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                },
                "params": {
                  "Region": "cn-north-1",
                  "UseFIPS": false,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
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                },
                "params": {
                  "Region": "cn-northwest-1",
                  "UseFIPS": false,
                  "UseDualStack": false

    }
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              {
                "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
                  }
                },
                "params": {
                  "Region": "cn-north-1",
                  "UseFIPS": true,
                  "UseDualStack": true
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                "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
                "expect": {
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                    "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
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                "params": {
                  "Region": "cn-north-1",
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            "UseFIPS": true,
            "UseDualStack": false
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          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
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            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },

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          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"
            }
           },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
```

```
            "url": "https://license-manager.us-gov-west-1.amazonaws.com"
          }
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        "params": {
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          "UseFIPS": false,
          "UseDualStack": false
        }
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      {
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        "expect": {
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        "params": {
          "Region": "us-gov-west-1",
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          "UseDualStack": false
        }
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        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
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          }
        },

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          "UseFIPS": true,
          "UseDualStack": true
        }
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      {
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        "expect": {
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          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": true
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```
      }
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disabled",
      "expect": {
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          "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
         "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled
but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-iso-east-1",
```

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            "UseFIPS": false,
            "UseDualStack": true
          }
        },
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          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },

      {
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          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },

    "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
```

```
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

  "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
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    "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
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      "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
```

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                  "expect": {
                    "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
                  },
                  "params": {
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                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
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                  "documentation": "Missing region",
                  "expect": {
                    "error": "Invalid Configuration: Missing Region"
                  }
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              ],
              "version": "1.0"
            }
          }
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        "com.amazonaws.licensemanager#AcceptGrant": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
          "output": {
            "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
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```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
    },
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        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
            "httpResponseCode": 401
          },
          "smithy.api#documentation": "<p>Access to resource denied.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 401
        }
      },
      "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
        "type": "enum",
        "members": {
          "DISTRIBUTED_GRANTS_ONLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
            }
          },
          "ALL_GRANTS_PERMITTED_BY_ISSUER": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#AllowedOperation": {

     "type": "enum",
        "members": {
          "CREATE_GRANT": {
            "target": "smithy.api#Unit",
```

```
            "traits": {
                "smithy.api#enumValue": "CreateGrant"
            }
        },
        "CHECKOUT_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CheckoutLicense"
            }
        },
        "CHECKOUT_BORROW_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CheckoutBorrowLicense"
            }
        },
        "CHECK_IN_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CheckInLicense"
            }
        },
        "EXTEND_CONSUMPTION_LICENSE":
{
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ExtendConsumptionLicense"
            }
        },
        "LIST_PURCHASED_LICENSES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ListPurchasedLicenses"
            }
        },
        "CREATE_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CreateToken"
            }
        }
    }
},
"com.amazonaws.licensemanager#AllowedOperationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#AllowedOperation"
    },
```

```
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max":
7
            }
        }
    },
    "com.amazonaws.licensemanager#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 2048
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
{
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n        policy associated with this account.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
```

```
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
      },

    "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
          "smithy.api#default": false
        }
      },
      "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
          "AllowEarlyCheckIn": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
              "smithy.api#required": {}
            }
          }

},
        "traits": {
          "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
      },
      "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
      },
      "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
```

```
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"

    },
        {
          "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
      }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
      "type": "structure",
      "members": {
        "LicenseConsumptionToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
```

```
                "smithy.api#documentation": "<p>License consumption token.</p>",
                "smithy.api#required": {}
              }
            },
            "Beneficiary": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#CheckInLicenseResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
```

```
                "target":
"com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
{
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n         For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
```

```
            "smithy.api#required": {}
          }
        },
        "NodeId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Node ID.</p>"
          }
        },
        "CheckoutMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
            "smithy.api#documentation": "<p>Information about constraints.</p>"
          }
        },
        "ClientToken": {
          "target": "com.amazonaws.licensemanager#ClientToken",
          "traits": {
            "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
          }
        },
        "LicenseConsumptionToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License consumption token.</p>"
          }
        },
        "EntitlementsAllowed":
{
          "target": "com.amazonaws.licensemanager#EntitlementDataList",
          "traits": {
            "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
```

```
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
          },
          "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
              "smithy.api#documentation": "<p>Signed token.</p>"
            }
          },
          "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
            }
          },
          "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
            }
          },
          "CheckoutMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Information about constraints.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
        },
        "errors": [
          {
```

```
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target":
"com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n          <p>If the
account that created the license is the same that is performing the check out, you must\n            specify the account
as the beneficiary.</p>\n        </note>"
        }
      },
      "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
          "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product
SKU.</p>",
              "smithy.api#required": {}
            }
          },
```

```
            "CheckoutType": {
              "target": "com.amazonaws.licensemanager#CheckoutType",
              "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>",
                "smithy.api#required": {}
              }
            },
            "KeyFingerprint": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                "smithy.api#required": {}
              }
            },
            "Entitlements": {
              "target": "com.amazonaws.licensemanager#EntitlementDataList",
              "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",

        "smithy.api#required": {}
              }
            },
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientToken",
              "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            },
            "Beneficiary": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>"
              }
            },
            "NodeId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
              }
            }
          },
          "traits": {

          "smithy.api#input": {}
          }
        },
```

```
    "com.amazonaws.licensemanager#CheckoutLicenseResponse": {
      "type": "structure",
      "members": {
        "CheckoutType": {
          "target": "com.amazonaws.licensemanager#CheckoutType",
          "traits": {
            "smithy.api#documentation": "<p>Checkout type.</p>"
          }
        },
        "LicenseConsumptionToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License consumption token.</p>"
          }
        },
        "EntitlementsAllowed": {
          "target": "com.amazonaws.licensemanager#EntitlementDataList",
          "traits": {
            "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
          }
        },
         "SignedToken": {
          "target": "com.amazonaws.licensemanager#SignedToken",
          "traits": {
            "smithy.api#documentation": "<p>Signed token.</p>"
          }
        },
        "NodeId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Node ID.</p>"
          }
        },
        "IssuedAt": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
          }
        },
        "Expiration": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
          }
        },
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CheckoutType": {
    "type": "enum",
    "members": {
        "PROVISIONAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PROVISIONAL"
            }
        },
        "PERPETUAL": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PERPETUAL"
            }
         }
    }
},
"com.amazonaws.licensemanager#ClientRequestToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 36
        }
    }
},
"com.amazonaws.licensemanager#ClientToken": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
        },
        "smithy.api#pattern": "^\\S+$"
    }
},
"com.amazonaws.licensemanager#ConflictException": {
    "type": "structure",
    "members": {
```

```
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "ConflictException",
                "httpResponseCode":
409
            },
            "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 409
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },

 "traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
            "RenewType": {
                "target": "com.amazonaws.licensemanager#RenewType",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Renewal frequency.</p>"
            }
          },
          "ProvisionalConfiguration": {
            "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
             }
          },
          "BorrowConfiguration": {
            "target": "com.amazonaws.licensemanager#BorrowConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target":
"com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}

    }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Principals": {
                "target": "com.amazonaws.licensemanager#PrincipalArnList",
                "traits": {
                    "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an Amazon Resource Name\n        (ARN):</p>\n        <ul>\n            <li>\n                <p>An Amazon Web Services account, which includes only the account specified.</p>\n            </li>\n        </ul>\n        <ul>\n            <li>\n                <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n            </li>\n        </ul>\n <ul>\n
```

\n An organization, which will include all accounts across your organization. \n \n ",
"smithy.api#required": {}
}
},
"HomeRegion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Home Region of the grant. ",
"smithy.api#required": {}
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},

"com.amazonaws.licensemanager#CreateGrantResponse": {
"type": "structure",
"members": {
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Grant ARN. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"Version": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant version. "
}
}
},
"traits": {

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            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersion":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information,
see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
```

idempotency of the request. ",

"smithy.api#required": {}
}
},
"GrantArn": {
"target": "com.amazonaws.licensemanager#Arn",
"traits": {
"smithy.api#documentation": " Amazon Resource Name (ARN) of the grant. ",
"smithy.api#required": {}
}
},
"GrantName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Grant name. "
}
},
"AllowedOperations": {
"target": "com.amazonaws.licensemanager#AllowedOperationList",
"traits": {
"smithy.api#documentation": " Allowed operations for the grant. "
}
},
"Status": {
"target": "com.amazonaws.licensemanager#GrantStatus",
"traits": {
"smithy.api#documentation": " Grant status. "
}
},
"StatusReason": {
"target": "com.amazonaws.licensemanager#StatusReasonMessage",
"traits": {
"smithy.api#documentation": " Grant status reason. "
}
},
"SourceVersion": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Current version of the grant. "
}
},
"Options": {
"target": "com.amazonaws.licensemanager#Options",
"traits": {
"smithy.api#documentation": " The options specified for the grant. "
}
}

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        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
          }
        },
        "traits":
{
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicense": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
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            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a license.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
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            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n            <p>A license configuration is an abstraction of a customer license agreement that can be\n            consumed and enforced by License Manager. Components include specifications for the license\n            type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n            Dedicated Instance, Dedicated Host, or all of these), license affinity  to host (how long a \n            license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
                }
            },
            "LicenseCountHardLimit": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n            blocks the launch of new instances.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
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                "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n          vary by dimension, as follows.</p>\n
<ul>\n            <li>\n              <p>\n                <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
          <code>licenseAffinityToHost</code> |\n              <code>maximumCores</code> |
<code>minimumCores</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
<code>Instances</code> dimension: <code>allowedTenancy</code> | \n              <code>maximumCores</code> |
<code>minimumCores</code> |\n              <code>maximumSockets</code> | <code>minimumSockets</code> |\n
          <code>maximumVcpus</code> | <code>minimumVcpus</code>\n              </p>\n            </li>\n
<li>\n
  <p>\n                <code>Sockets</code> dimension: <code>allowedTenancy</code> | \n
<code>licenseAffinityToHost</code> |\n              <code>maximumSockets</code> |
<code>minimumSockets</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
<code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n              <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n              </p>\n            </li>\n          </ul>\n          <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n          values for
<code>allowedTenancy</code> are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n
<code>EC2-DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"
              }
            },

  "Tags": {
              "target": "com.amazonaws.licensemanager#TagList",
              "traits": {
                "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
              }
            },
            "DisassociateWhenNotFound": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
              }
            },
            "ProductInformationList": {
              "target": "com.amazonaws.licensemanager#ProductInformationList",
              "traits": {
                "smithy.api#documentation": "<p>Product information.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse":
```

```
{
    "type": "structure",
    "members": {
      "LicenseConfigurationArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
       },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
    "type": "structure",
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```
        "members": {
          "ResourceArn": {

            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
              "smithy.api#required": {}
            }
          },
          "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n         For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
              "smithy.api#required": {}
            }
          },
          "DestinationLicenseContext":
{
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",

          "traits": {
              "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
          }
        },
        "traits": {
```

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            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "ReportGeneratorName":
{
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
```

```
                "smithy.api#documentation": "<p>Name of the report generator.</p>",
                "smithy.api#required": {}
              }
            },
            "Type": {
              "target": "com.amazonaws.licensemanager#ReportTypeList",
              "traits": {
                "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be generated:</p>\n <ul>\n <li>\n <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n </li>\n <li>\n <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n </li>\n </ul>",
                "smithy.api#required": {}

        }
            },
            "ReportContext": {
              "target": "com.amazonaws.licensemanager#ReportContext",
              "traits": {
                "smithy.api#documentation": "<p>Defines the type of license configuration the report generator tracks.</p>",
                "smithy.api#required": {}
              }
            },
            "ReportFrequency": {
              "target": "com.amazonaws.licensemanager#ReportFrequency",
              "traits": {
                "smithy.api#documentation": "<p>Frequency by which reports are generated.  Reports can be generated daily, monthly, or weekly.</p>",
                "smithy.api#required": {}
              }
            },
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientRequestToken",
              "traits": {
                "smithy.api#documentation": "<p>Unique,
 case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            },
            "Description": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanager#TagList",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
          "LicenseManagerReportGeneratorArn":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
generator.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product
 name.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product SKU.</p>",
              "smithy.api#required": {}
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            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#Issuer",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>",
                "smithy.api#required": {}
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region for the license.</p>",
                "smithy.api#required": {}

  }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-UTC format.</p>",
                "smithy.api#required": {}
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>",
                "smithy.api#required": {}
            }
         },
        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for workloads with offline\n          usage.</p>",
                "smithy.api#required": {}
            }
        },
```

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        "LicenseMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
            "smithy.api#documentation": "<p>Information about the license.</p>"
          }
        },
        "ClientToken": {
          "target": "com.amazonaws.licensemanager#ClientToken",
          "traits": {
            "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseResponse": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseStatus",
          "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersion": {
      "type": "operation",
      "input": {
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            "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#ConflictException"
             },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
          }
        },
        "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target":
"com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
              }
            },
            "LicenseName": {
              "target": "com.amazonaws.licensemanager#String",
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```
            "traits": {
                "smithy.api#documentation": "<p>License name.</p>",
                "smithy.api#required": {}
            }
        },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>",
                "smithy.api#required": {}
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#Issuer",
            "traits":
{
                "smithy.api#documentation": "<p>License issuer.</p>",
                "smithy.api#required": {}
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                 "smithy.api#documentation": "<p>Information about the license.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
            }
        },
```

```
            "ConsumptionConfiguration": {
              "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
              "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for workloads with offline\n          usage.</p>",
                "smithy.api#required": {}
              }
            },

  "Status": {
              "target": "com.amazonaws.licensemanager#LicenseStatus",
              "traits": {
                "smithy.api#documentation": "<p>License status.</p>",
                "smithy.api#required": {}
              }
            },
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientToken",
              "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            },
            "SourceVersion": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Current version of the license.</p>"
              }
            }
          },
          "traits": {

 "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>License ARN.</p>"
              }
            },
            "Version": {
              "target": "com.amazonaws.licensemanager#String",
```

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            "traits": {
                "smithy.api#documentation": "<p>New version of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output":
{}
    }
  },
  "com.amazonaws.licensemanager#CreateToken": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateTokenResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },

  {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
```

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            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n        <p>A refresh token is a JWT token used to get an access token. With an access token,\n          you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n          call License Manager to manage the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits":
{
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n          JWT token.</p>",
              "smithy.api#required": {}
            }
          },
          "RoleArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n          License Manager does not check whether the roles are in use.</p>"
            }
          },
          "ExpirationInDays": {
            "target": "com.amazonaws.licensemanager#Integer",
            "traits": {
              "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The default is 365 days.</p>"
            }
          },
          "TokenProperties": {
            "target": "com.amazonaws.licensemanager#MaxSize3StringList",
            "traits": {
              "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The data is mapped\n          to the amr claim of the JWT token.</p>"
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
              "smithy.api#required": {}
            }
```

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        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#CreateTokenResponse": {
      "type": "structure",
      "members": {
        "TokenId": {
          "target": "com.amazonaws.licensemanager#String",

          "traits": {
            "smithy.api#documentation": "<p>Token ID.</p>"
          }
        },
        "TokenType": {
          "target": "com.amazonaws.licensemanager#TokenType",
          "traits": {
            "smithy.api#documentation": "<p>Token type.</p>"
          }
        },
        "Token": {
          "target": "com.amazonaws.licensemanager#TokenString",
          "traits": {
            "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DateTime": {
      "type": "timestamp"
    },
    "com.amazonaws.licensemanager#DatetimeRange": {
      "type": "structure",
      "members": {
        "Begin": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Start of the time range.</p>",
            "smithy.api#required": {}
          }
        },
        "End": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
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            "traits": {
                "smithy.api#documentation": "<p>End of the time range.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
        }
      },
      "com.amazonaws.licensemanager#DeleteGrant": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes
the specified grant.</p>"
        }
      },
      "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
```

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            "GrantArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
              }
            },
            "StatusReason": {
              "target": "com.amazonaws.licensemanager#StatusReasonMessage",
              "traits": {
                "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
              }
            },
            "Version": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Current version of the
grant.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#DeleteGrantResponse": {
          "type": "structure",
          "members": {
            "GrantArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanager#GrantStatus",
              "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
              }
            },
            "Version": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation":
"<p>Grant version.</p>"
              }
            }
```

```
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicense": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"

},
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
```

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        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },

      "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n        <p>You cannot delete a license configuration that is in use.</p>"
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members":
 {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the license configuration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
```

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        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
           }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n          <p>This action deletes the report generator, which stops it from generating future reports.\n          The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
          "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {

 "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#DeleteLicenseRequest": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
              }
            },
            "SourceVersion": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Current version of the license.</p>",
                "smithy.api#required":
{}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#DeleteLicenseResponse": {
          "type": "structure",
          "members": {
            "Status": {
              "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
              "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
```

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            }
          },
          "DeletionDate": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteToken": {
        "type": "operation",
         "input": {
          "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },

      {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes the specified token. Must be called in the license home
Region.</p>"
```

```
    }
  },
  "com.amazonaws.licensemanager#DeleteTokenRequest": {
    "type": "structure",
    "members": {
      "TokenId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token ID.</p>",
          "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#DeleteTokenResponse": {
    "type": "structure",
    "members": {},
    "traits": {
      "smithy.api#output": {}

   }
  },
  "com.amazonaws.licensemanager#DigitalSignatureMethod": {
    "type": "enum",
    "members": {
      "JWT_PS384": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "JWT_PS384"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#Entitlement": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Entitlement name.</p>",
          "smithy.api#required": {}
        }
      },
      "Value": {
        "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Entitlement resource. Use only
if the unit is None.</p>"
            }
          },
          "MaxCount": {
            "target": "com.amazonaws.licensemanager#Long",
            "traits": {
              "smithy.api#documentation": "<p>Maximum entitlement count. Use if the unit is not None.</p>"
            }
          },
          "Overage": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
            }
          },
          "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementUnit",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement unit.</p>",
              "smithy.api#required": {}
            }
          },
          "AllowCheckIn": {
            "target":
"com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
        }
      },
      "com.amazonaws.licensemanager#EntitlementData": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement data name.</p>",
              "smithy.api#required": {}
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
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            "traits": {
                "smithy.api#documentation": "<p>Entitlement
data value.</p>"
            }
          },
          "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement data unit.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
        }
      },
      "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#EntitlementData"
        }
      },
      "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "enum",
        "members": {
          "COUNT": {
            "target": "smithy.api#Unit",
            "traits": {

"smithy.api#enumValue": "Count"
            }
          },
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "SECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Seconds"
            }
          },
          "MICROSECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
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            "smithy.api#enumValue": "Microseconds"
          }
        },
        "MILLISECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Milliseconds"
          }
        },
        "BYTES": {
          "target": "smithy.api#Unit",
           "traits": {
            "smithy.api#enumValue": "Bytes"
          }
        },
        "KILOBYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobytes"
          }
        },
        "MEGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabytes"
          }
        },
        "GIGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes"
          }
        },
        "TERABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabytes"
          }
        },
        "BITS":
{
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits"
          }
        },
        "KILOBITS": {
          "target": "smithy.api#Unit",
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            "traits": {
                "smithy.api#enumValue": "Kilobits"
            }
        },
        "MEGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabits"
            }
        },
        "GIGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabits"
            }
        },
        "TERABITS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits"

}
        },
        "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Percent"
            }
        },
        "BYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes/Second"
            }
        },
        "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
            }
        },
        "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
            }
        },
        "GIGABYTES_PER_SECOND": {
```

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            "target": "smithy.api#Unit",
             "traits": {
               "smithy.api#enumValue": "Gigabytes/Second"
            }
          },
          "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
               "smithy.api#enumValue": "Terabytes/Second"
            }
          },
          "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
               "smithy.api#enumValue": "Bits/Second"
            }
          },
          "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
               "smithy.api#enumValue": "Kilobits/Second"
            }
          },
          "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
               "smithy.api#enumValue":
"Megabits/Second"
            }
          },
          "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
               "smithy.api#enumValue": "Gigabits/Second"
            }
          },
          "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
               "smithy.api#enumValue": "Terabits/Second"
            }
          },
          "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
               "smithy.api#enumValue": "Count/Second"
            }
          }
```

```
        }
      },
      "com.amazonaws.licensemanager#EntitlementList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Entitlement"
        }
      },
      "com.amazonaws.licensemanager#EntitlementNotAllowedException":
{
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },
      "com.amazonaws.licensemanager#EntitlementUnit": {
        "type": "enum",
        "members": {
          "COUNT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Count"
            }
          },
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "SECONDS":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Seconds"
            }
          },
          "MICROSECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Microseconds"
```

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    }
  },
  "MILLISECONDS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Milliseconds"
    }
  },
  "BYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bytes"
    }
  },
  "KILOBYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Kilobytes"
     }
  },
  "MEGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Megabytes"
    }
  },
  "GIGABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Gigabytes"
    }
  },
  "TERABYTES": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Terabytes"
    }
  },
  "BITS": {
    "target": "smithy.api#Unit",
    "traits": {
      "smithy.api#enumValue": "Bits"
    }
  },
  "KILOBITS": {
    "target": "smithy.api#Unit",
    "traits": {
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            "smithy.api#enumValue": "Kilobits"
          }
        },
        "MEGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabits"
          }
        },
        "GIGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits"
          }
        },
        "TERABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits"
          }
        },
        "PERCENT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Percent"
          }
        },
        "BYTES_PER_SECOND": {
          "target":
"smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bytes/Second"
          }
        },
        "KILOBYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobytes/Second"
          }
        },
        "MEGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabytes/Second"
          }
        },
        "GIGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
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            "traits": {
              "smithy.api#enumValue": "Gigabytes/Second"
            }
          },
          "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {

"smithy.api#enumValue": "Terabytes/Second"
            }
          },
          "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Bits/Second"
            }
          },
          "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Kilobits/Second"
            }
          },
          "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Megabits/Second"
            }
          },
          "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Gigabits/Second"
            }
          },

        "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Terabits/Second"
            }
          },
          "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Count/Second"
            }
          }
```

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        }
      },
      "com.amazonaws.licensemanager#EntitlementUsage": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement usage name.</p>",
              "smithy.api#required": {}
            }
          },
          "ConsumedValue": {
            "target": "com.amazonaws.licensemanager#String",

          "traits": {
              "smithy.api#documentation": "<p>Resource usage consumed.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxCount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
          },
          "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
      },
      "com.amazonaws.licensemanager#EntitlementUsageList":
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
      },
      "com.amazonaws.licensemanager#ExtendLicenseConsumption": {
        "type": "operation",
        "input": {
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      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
       },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
    }
  },
  "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
    "type": "structure",
    "members": {
      "LicenseConsumptionToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>License consumption token.</p>",
          "smithy.api#required": {}

  }
      },
      "DryRun": {
        "target": "com.amazonaws.licensemanager#Boolean",
        "traits": {
          "smithy.api#default": false,
          "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
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without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>"
                }
            },

            "Expiration": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Date and time at which the license consumption expires.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#FailedDependencyException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            },
            "ErrorCode": {
                "target": "com.amazonaws.licensemanager#String"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FailedDependency",
                "httpResponseCode": 424
            },
            "smithy.api#documentation":
"<p>A dependency required to run the API is missing.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 424
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        }
      },
      "com.amazonaws.licensemanager#Filter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#FilterName",
            "traits": {
              "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
            }
          },
          "Values": {
            "target": "com.amazonaws.licensemanager#FilterValues",
            "traits": {
              "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only specify one value for the filter.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a\n describe operation. Filters can be used to match a set of resources by specific criteria,\n such as tags, attributes, or IDs.</p>"
        }
      },
      "com.amazonaws.licensemanager#FilterLimitExceededException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
          },
          "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },
      "com.amazonaws.licensemanager#FilterList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Filter"
        }
      },
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"com.amazonaws.licensemanager#FilterName": {
   "type": "string"
},
"com.amazonaws.licensemanager#FilterValue": {
   "type": "string"
},
"com.amazonaws.licensemanager#FilterValues": {
   "type": "list",
   "member": {
      "target": "com.amazonaws.licensemanager#FilterValue",
      "traits": {
         "smithy.api#xmlName": "item"
      }
   }
},
"com.amazonaws.licensemanager#Filters": {
   "type": "list",
   "member": {
      "target": "com.amazonaws.licensemanager#Filter",
      "traits": {
         "smithy.api#xmlName": "item"
      }
   }
},
"com.amazonaws.licensemanager#GetAccessToken": {
   "type": "operation",
   "input": {
       "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
   },
   "output": {
      "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
   },
   "errors": [
      {
         "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
         "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
         "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
         "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
         "target": "com.amazonaws.licensemanager#ValidationException"
      }
```

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        ],
        "traits": {
          "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access
 tokens\n        are valid for one hour.</p>"
        }
      },
      "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
          "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
              "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
              "smithy.api#required": {}
            }
          },
          "TokenProperties": {
            "target": "com.amazonaws.licensemanager#MaxSize3StringList",
            "traits": {
              "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetAccessTokenResponse":
 {
        "type": "structure",
        "members": {
          "AccessToken": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
              "smithy.api#documentation": "<p>Temporary access token.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#GetGrant": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetGrantRequest"
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    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

    },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
},
"com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
```

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    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
      "Grant": {
        "target": "com.amazonaws.licensemanager#Grant",
        "traits": {
          "smithy.api#documentation": "<p>Grant details.</p>"
        }
      }
    },
    "traits": {

  "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"

   },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
```

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        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits":
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{
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                 }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>License rules.</p>"
                }
            },
            "LicenseCount": {
                "target": "com.amazonaws.licensemanager#BoxLong",

                "traits": {
                    "smithy.api#documentation": "<p>Number of available licenses.</p>"
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        }
      },
      "LicenseCountHardLimit": {
        "target": "com.amazonaws.licensemanager#BoxBoolean",
        "traits": {
          "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
        }
      },
      "ConsumedLicenses": {
        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
          "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
        }
      },
      "Status": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>License configuration status.</p>"
        }

  },
      "OwnerAccountId": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Account ID of the owner of the license configuration.</p>"
        }
      },
      "ConsumedLicenseSummaryList": {
        "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
        "traits": {
          "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
        }
      },
      "ManagedResourceSummaryList": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
        "traits": {
          "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
        }
      },
      "Tags": {
        "target": "com.amazonaws.licensemanager#TagList",
         "traits": {
          "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
        }
      },
      "ProductInformationList": {
        "target": "com.amazonaws.licensemanager#ProductInformationList",
        "traits": {
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                "smithy.api#documentation": "<p>Product information.</p>"
              }
            },
            "AutomatedDiscoveryInformation": {
              "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
              "traits": {
                "smithy.api#documentation": "<p>Automated discovery information.</p>"
              }
            },
            "DisassociateWhenNotFound": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>When
true, disassociates a resource when software is uninstalled.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#GetLicenseConversionTask": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {

 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {
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            "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information
on.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information
 about the license type converted from.</p>"
                }
            },
            "DestinationLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
                }
            },
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            "StatusMessage": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
               }
            },
            "Status": {
               "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
               "traits": {
                  "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
               }
            },

  "StartTime": {
               "target": "com.amazonaws.licensemanager#DateTime",
               "traits": {
                  "smithy.api#documentation": "<p>Time at which the license type conversion task was started .</p>"
               }
            },
            "LicenseConversionTime": {
               "target": "com.amazonaws.licensemanager#DateTime",
               "traits": {
                  "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
               }
            },
            "EndTime": {
               "target": "com.amazonaws.licensemanager#DateTime",
               "traits": {
                  "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator":
{
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
         },
         "errors": [
            {
```

```
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"

        },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
      },
      "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
          "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
              "smithy.api#required":
{}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
```

```
            "ReportGenerator": {
               "target": "com.amazonaws.licensemanager#ReportGenerator",
               "traits": {
                  "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanager#GetLicenseRequest": {
         "type": "structure",
         "members": {
            "LicenseArn": {
               "target": "com.amazonaws.licensemanager#Arn",
               "traits": {

 "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                  "smithy.api#required": {}
               }
            },
            "Version": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>License version.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanager#GetLicenseResponse": {
         "type": "structure",
         "members": {
            "License": {
               "target": "com.amazonaws.licensemanager#License",
               "traits": {
                  "smithy.api#documentation": "<p>License details.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
```

```
"com.amazonaws.licensemanager#GetLicenseUsage": {
      "type": "operation",
      "input": {
         "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
      },
      "output": {
         "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
      },
      "errors": [
         {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
         {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
         {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
         },
         {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
         },
         {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
         },
         {

"target": "com.amazonaws.licensemanager#ValidationException"
         }
      ],
      "traits": {
         "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified license.</p>"
      }
   },
   "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
      "type": "structure",
      "members": {
         "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
               "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
               "smithy.api#required": {}
            }
         }
      },
      "traits": {
         "smithy.api#input": {}
      }
```

```
    },
    "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
      "type": "structure",
      "members": {
        "LicenseUsage": {
          "target":
"com.amazonaws.licensemanager#LicenseUsage",
          "traits": {
            "smithy.api#documentation": "<p>License usage details.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetServiceSettings": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
         },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Gets the License Manager settings for the current Region.</p>"
      }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#input": {}
      }
```

```
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
      "type": "structure",
      "members": {
        "S3BucketArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data, discovery data,\n        and so on.</p>"

 }
        },
        "SnsTopicArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>SNS topic configured to receive notifications from License Manager.</p>"
          }
        },
        "OrganizationConfiguration": {
          "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License Manager for\n        cross-account discovery.</p>"
          }
        },
        "EnableCrossAccountsDiscovery": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
          }

      },
        "LicenseManagerResourceShareArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource share. The License Manager management account \n        provides member accounts with access to this share.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#Grant": {
      "type": "structure",
      "members": {
```

```
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
          }
        },
        "GrantName": {

 "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant name.</p>",
            "smithy.api#required": {}
          }
        },
        "ParentArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Parent ARN.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>License ARN.</p>",
            "smithy.api#required": {}
          }
        },
        "GranteePrincipalArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {

"smithy.api#documentation": "<p>The grantee principal ARN.</p>",
            "smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the grant.</p>",
            "smithy.api#required": {}
          }
        },
        "GrantStatus": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>",
```

```
            "smithy.api#required": {}
          }
        },
        "StatusReason": {
          "target": "com.amazonaws.licensemanager#StatusReasonMessage",
          "traits": {
            "smithy.api#documentation": "<p>Grant status reason.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>",
            "smithy.api#required": {}
          }
        },
        "GrantedOperations": {
          "target": "com.amazonaws.licensemanager#AllowedOperationList",
          "traits": {
            "smithy.api#documentation": "<p>Granted operations.</p>",
            "smithy.api#required": {}
          }
        },
        "Options": {
          "target": "com.amazonaws.licensemanager#Options",
          "traits": {
            "smithy.api#documentation": "<p>The options specified for the grant.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation":
"<p>Describes a grant.</p>"
      }
    },
    "com.amazonaws.licensemanager#GrantList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#Grant"
      }
    },
    "com.amazonaws.licensemanager#GrantStatus": {
      "type": "enum",
      "members": {
        "PENDING_WORKFLOW": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "PENDING_WORKFLOW"
```

```
            }
          },
          "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_ACCEPT"
            }
          },
          "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "REJECTED"

          }
          },
          "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ACTIVE"
            }
          },
          "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
          },
          "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
          },
          "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_DELETE"
            }
          },
          "DISABLED": {
            "target": "smithy.api#Unit",
            "traits":
{
              "smithy.api#enumValue": "DISABLED"
            }
          },
          "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
```

```
            "traits": {
              "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>"
            }

},
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product name.</p>"
            }
          },
          "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product SKU.</p>"
            }
          },
          "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
              "smithy.api#documentation": "<p>Granted license issuer.</p>"
            }
          },
          "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Home Region of the granted license.</p>"

           }
          },
          "Status": {
```

```
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
              "smithy.api#documentation": "<p>Granted license status.</p>"
            }
          },
          "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
              "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
            }
          },
          "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
            }
          },
          "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
             "traits": {
              "smithy.api#documentation": "<p>License entitlements.</p>"
            }
          },
          "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
          },
          "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Granted license metadata.</p>"
            }
          },
          "CreateTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Creation time of the granted license.</p>"

    }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Version of the granted license.</p>"
            }
```

```
            },
            "ReceivedMetadata": {
               "target": "com.amazonaws.licensemanager#ReceivedMetadata",
               "traits": {
                  "smithy.api#documentation": "<p>Granted license received metadata.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
         }
      },
      "com.amazonaws.licensemanager#GrantedLicenseList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#GrantedLicense"
         }
      },
      "com.amazonaws.licensemanager#ISO8601DateTime":
{
         "type": "string",
         "traits": {
            "smithy.api#length": {
               "min": 0,
               "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[ 0-3]|[0-1][0-9]):[0-5][0-9])+$"
         }
      },
      "com.amazonaws.licensemanager#Integer": {
         "type": "integer"
      },
      "com.amazonaws.licensemanager#InvalidParameterValueException": {
         "type": "structure",
         "members": {
            "Message": {
               "target": "com.amazonaws.licensemanager#Message"
            }
         },
         "traits": {
            "aws.protocols#awsQueryError": {
               "code": "InvalidParameterValueProvided",
               "httpResponseCode": 400
            },
            "smithy.api#documentation":
 "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
```

```
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its state. </p>\n         <p>For example, you cannot allocate a license to an instance in the process of shutting\n down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },

    "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter.</p>",
                    "smithy.api#required": {}
                }
            },
            "Condition": {
                "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
                "traits": {
                    "smithy.api#documentation": "<p>Condition of the filter.</p>",
                    "smithy.api#required": {}
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }
```

```
},
    "traits": {
      "smithy.api#documentation": "<p>An inventory filter.</p>"
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterCondition": {
    "type": "enum",
    "members": {
      "EQUALS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "EQUALS"
        }
      },
      "NOT_EQUALS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "NOT_EQUALS"
        }
      },
      "BEGINS_WITH": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "BEGINS_WITH"
        }
      },
      "CONTAINS": {
        "target": "smithy.api#Unit",
        "traits": {
           "smithy.api#enumValue": "CONTAINS"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#InventoryFilterList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#InventoryFilter"
    }
  },
  "com.amazonaws.licensemanager#Issuer": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Issuer name.</p>",
          "smithy.api#required": {}
```

```
            }
          },
          "SignKey": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage
 of sign and verify, \n         and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
        }
      },
      "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Issuer name.</p>"
            }
          },
          "SignKey": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage of sign and verify, \n         and support the RSASSA-PSS SHA-256 signing
algorithm.</p>"
            }
          },
          "KeyFingerprint": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
        }
      },
      "com.amazonaws.licensemanager#License": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

        "smithy.api#documentation": "<p>License name.</p>"
            }
        },
        "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

        "smithy.api#documentation": "<p>Home Region of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
            }
```

```
            },
            "Beneficiary": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>License beneficiary.</p>"
               }
            },
            "Entitlements": {

   "target": "com.amazonaws.licensemanager#EntitlementList",
               "traits": {
                  "smithy.api#documentation": "<p>License entitlements.</p>"
               }
            },
            "ConsumptionConfiguration": {
               "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
               "traits": {
                  "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
               }
            },
            "LicenseMetadata": {
               "target": "com.amazonaws.licensemanager#MetadataList",
               "traits": {
                  "smithy.api#documentation": "<p>License metadata.</p>"
               }
            },
            "CreateTime": {
               "target": "com.amazonaws.licensemanager#ISO8601DateTime",
               "traits": {
                  "smithy.api#documentation": "<p>License
creation time.</p>"
               }
            },
            "Version": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>License version.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
         }
      },
      "com.amazonaws.licensemanager#LicenseConfiguration": {
         "type": "structure",
         "members": {
            "LicenseConfigurationId": {
```

```
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
    }
  },
  "LicenseConfigurationArn": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
    }
  },
  "Name": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Name of the license configuration.</p>"
    }
  },
  "Description": {
    "target": "com.amazonaws.licensemanager#String",
    "traits": {
      "smithy.api#documentation": "<p>Description of the license configuration.</p>"
    }
  },
  "LicenseCountingType": {
    "target": "com.amazonaws.licensemanager#LicenseCountingType",
    "traits": {
      "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
    }
  },
  "LicenseRules": {
    "target": "com.amazonaws.licensemanager#StringList",
    "traits": {
      "smithy.api#documentation": "<p>License rules.</p>"
    }
  },
  "LicenseCount": {
    "target": "com.amazonaws.licensemanager#BoxLong",
    "traits": {
      "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
    }
  },
  "LicenseCountHardLimit": {
    "target": "com.amazonaws.licensemanager#BoxBoolean",
    "traits": {
      "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
    }
  },
  "DisassociateWhenNotFound": {
```

```
            "target": "com.amazonaws.licensemanager#BoxBoolean",
             "traits": {
               "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
          },
          "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Status of the license configuration.</p>"
            }
          },
          "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"

         }
          },
          "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
            }
          },
          "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>Product information.</p>"
            }
          },
          "AutomatedDiscoveryInformation": {

            "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
            "traits": {
              "smithy.api#documentation": "<p>Automated discovery information.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
        "type": "structure",
        "members": {
          "ResourceArn":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Type of server resource.</p>"
            }
          },
          "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource consuming licenses.</p>"
            }
          },
          "AssociationTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {

    "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
            }
          },
          "AmiAssociationScope": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>"
            }
          }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members":
{
            "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
                }
            },
            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits":
{
                    "smithy.api#documentation": "<p>Type of resource.</p>"
                }
            },
            "ResourceStatus": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

```
                "smithy.api#documentation": "<p>Status of the resource.</p>"
              }
            },
            "ResourceOwnerId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
              }
            },
            "AssociationTime": {
              "target": "com.amazonaws.licensemanager#DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Time when the license configuration was initially associated with the resource.</p>"
              }
            },

      "ConsumedLicenses": {
              "target": "com.amazonaws.licensemanager#BoxLong",
              "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license configuration.</p>"
          }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
          }
      },
      "com.amazonaws.licensemanager#LicenseConfigurations": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfiguration"
          }
      },
      "com.amazonaws.licensemanager#LicenseConversionContext": {

    "type": "structure",
          "members": {
            "UsageOperation": {
              "target": "com.amazonaws.licensemanager#UsageOperation",
              "traits": {
```

```
                "smithy.api#documentation": "<p>The Usage operation value that corresponds to the license type you are converting your resource from.  For more information about which platforms correspond to which usage operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n         </p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
          }
        },
        "com.amazonaws.licensemanager#LicenseConversionTask": {
          "type": "structure",
          "members": {
            "LicenseConversionTaskId": {

         "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"
              }
            },
            "ResourceArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated with the license type\n         conversion task.</p>"
              }
            },
            "SourceLicenseContext": {
              "target": "com.amazonaws.licensemanager#LicenseConversionContext",
              "traits": {
                "smithy.api#documentation": "<p>Information about the license type this conversion task converted from.</p>"
              }
            },
            "DestinationLicenseContext": {
              "target":
 "com.amazonaws.licensemanager#LicenseConversionContext",
              "traits": {
                "smithy.api#documentation": "<p>Information about the license type this conversion task converted to.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
              "traits": {
                "smithy.api#documentation": "<p>The status of the conversion task.</p>"
              }
```

```
            },
            "StatusMessage": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
               }
            },
            "StartTime": {
               "target": "com.amazonaws.licensemanager#DateTime",
               "traits": {
                  "smithy.api#documentation":
 "<p>The time the conversion task was started at.</p>"
               }
            },
            "LicenseConversionTime": {
               "target": "com.amazonaws.licensemanager#DateTime",
               "traits": {
                  "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
               }
            },
            "EndTime": {
               "target": "com.amazonaws.licensemanager#DateTime",
               "traits": {
                  "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
         }
      },
      "com.amazonaws.licensemanager#LicenseConversionTaskId": {
         "type": "string",
         "traits": {

          "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
         }
      },
      "com.amazonaws.licensemanager#LicenseConversionTaskStatus": {
         "type": "enum",
         "members": {
            "IN_PROGRESS": {
               "target": "smithy.api#Unit",
```

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            "traits": {
              "smithy.api#enumValue": "IN_PROGRESS"
            }
          },
          "SUCCEEDED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "SUCCEEDED"
            }
          },
          "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTasks":
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
      },
      "com.amazonaws.licensemanager#LicenseCountingType": {
        "type": "enum",
        "members": {
          "VCPU": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "vCPU"
            }
          },
          "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Instance"
            }
          },
          "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Core"
            }
          },
          "SOCKET": {
            "target": "smithy.api#Unit",
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            "traits": {
              "smithy.api#enumValue": "Socket"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseDeletionStatus": {
        "type": "enum",
        "members": {
          "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_DELETE"
            }
          },
          "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#License"
        }
      },
      "com.amazonaws.licensemanager#LicenseOperationFailure": {

        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Resource type.</p>"
            }
          },
          "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Error message.</p>"
              }
            },
            "FailureTime": {
              "target": "com.amazonaws.licensemanager#DateTime",
              "traits": {

        "smithy.api#documentation": "<p>Failure time.</p>"
              }
            },
            "OperationName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Name of the operation.</p>"
              }
            },
            "ResourceOwnerId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
              }
            },
            "OperationRequestedBy": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
              }
            },
            "MetadataList": {

              "target": "com.amazonaws.licensemanager#MetadataList",
              "traits": {
                "smithy.api#documentation": "<p>Reserved.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
          }
        },
        "com.amazonaws.licensemanager#LicenseOperationFailureList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
          }
        },
        "com.amazonaws.licensemanager#LicenseSpecification": {
```

```
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

              "smithy.api#required": {}
            }
          },
          "AmiAssociationScope": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseSpecifications": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseSpecification"
        }
      },
      "com.amazonaws.licensemanager#LicenseStatus": {
        "type": "enum",
        "members": {
          "AVAILABLE": {
            "target": "smithy.api#Unit",

            "traits": {
              "smithy.api#enumValue": "AVAILABLE"
            }
          },
          "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
          },
          "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
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            "smithy.api#enumValue": "DEACTIVATED"
          }
        },
        "SUSPENDED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "SUSPENDED"
          }
        },
        "EXPIRED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EXPIRED"
          }
        },

      "PENDING_DELETE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "PENDING_DELETE"
          }
        },
        "DELETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DELETED"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#LicenseUsage": {
      "type": "structure",
      "members": {
        "EntitlementUsages": {
          "target": "com.amazonaws.licensemanager#EntitlementUsageList",
          "traits": {
            "smithy.api#documentation": "<p>License entitlement usages.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"

      }
    },
    "com.amazonaws.licensemanager#LicenseUsageException": {
      "type": "structure",
      "members": {
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            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "LicenseUsageFailure",
                "httpResponseCode": 412
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {

   "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the
 specified license configuration.</p>\n         <p>Resource associations need not consume licenses from a license
configuration. \n         For example, an AMI or a stopped instance might not consume a license (depending on \n
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```
the license rules).</p>"
        }
      },
      "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results
 to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
          "LicenseConfigurationAssociations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
            "traits": {
              "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
            }
          },
          "NextToken": {

 "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
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    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListDistributedGrants": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
       },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
    "type": "structure",
    "members": {
      "GrantArns": {
        "target": "com.amazonaws.licensemanager#ArnList",
        "traits": {
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            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n
  <li>\n            <p>\n              <code>GranteePrincipalARN</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>LicenseIssuerName</code>\n
        </p>\n          </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
        "type": "structure",
        "members": {
            "Grants": {
                "target": "com.amazonaws.licensemanager#GrantList",

    "traits": {
                    "smithy.api#documentation": "<p>Distributed grant details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
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        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
        },
        "errors": [
          {

"target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
               "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
               "smithy.api#required": {}
             }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
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```
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse":
{
          "type": "structure",
          "members": {
            "LicenseOperationFailureList": {
              "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
              "traits": {
                "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#ListLicenseConfigurations": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
          },

      "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
```

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            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations
 for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
 configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next
 set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
```

```
operators\n are supported:</p>\n <ul>\n <li>\n <p>\n
<code>licenseCountingType</code> - The dimension for which licenses are counted.\n Possible values are
<code>vCPU</code> | <code>Instance</code> | <code>Core</code> | <code>Socket</code>.\n Logical
operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n
<p>\n <code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license
enforcement is used. \n Logical operators are <code>EQUALS</code> |
<code>NOT_EQUALS</code>.</p>\n
  </li>\n <li>\n <p>\n <code>usagelimitExceeded</code> - A Boolean value that
indicates whether the available licenses have been exceeded. \n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse": {
        "type": "structure",
        "members": {
          "LicenseConfigurations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurations",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",

           "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
        },
        "errors": [
          {
```

```
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest": {
        "type": "structure",
        "members": {
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {

    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#Filters",
            "traits": {
              "smithy.api#documentation": "<p>\n        Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
```

```
        "type": "structure",
        "members": {
          "LicenseConversionTasks": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target":
"com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
```

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            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest":
{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n          <li>\n            <p>\n              <code>LicenseConfigurationArn</code>\n
</p>\n          </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits":
{
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
```

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configurations.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }

        }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
             },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
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            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {

        "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {
          "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
              "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersions": {
        "type": "operation",
        "input": {
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```
      "target": "com.amazonaws.licensemanager#ListLicenseVersionsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
       },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
    "type": "structure",
    "members": {
      "LicenseArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
          "smithy.api#required": {}
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
         "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      },
      "MaxResults": {
        "target": "com.amazonaws.licensemanager#MaxSize100",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      }
```

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        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },

"NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicensesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
           },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
```

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            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListLicensesRequest": {
        "type": "structure",
        "members": {
          "LicenseArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
            }
          },

       "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n
   <li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>Status</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token
 for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
```

```
  "com.amazonaws.licensemanager#ListLicensesResponse": {
    "type": "structure",
    "members": {
      "Licenses": {
        "target": "com.amazonaws.licensemanager#LicenseList",
        "traits": {
          "smithy.api#documentation": "<p>License details.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {

"smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListReceivedGrants": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListReceivedGrantsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
       },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
```

```
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while specifying the\n          recipient as this Amazon Web Services account, your organization, or an organizational unit\n          (OU) to which this member account belongs.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
```

```
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
              "smithy.api#required": {}
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>ParentArn</code>\n        </p>\n        </li>\n
<li>\n        <p>\n        <code>GranteePrincipalArn</code>\n        </p>\n        </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse":
{
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
              "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
          "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
             "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>LicenseIssuerName</code>\n            </p>\n
</li>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n          <li>\n
<p>\n
        <code>GranterAccountId</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
        "type": "structure",
        "members": {
```

```
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",
           "traits": {
             "smithy.api#documentation": "<p>Received grant details.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
             "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedLicenses": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
```

```
      "traits": {
        "smithy.api#documentation": "<p>Lists received licenses.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization":
{
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {

    "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
      "type": "structure",
      "members": {
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
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supported:</p>\n <ul>\n <li>\n <p>\n <code>Beneficiary</code>\n </p>\n
</li>\n <li>\n <p>\n <code>ProductSKU</code>\n
</p>\n </li>\n </ul>"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": "<p>Token for the next set of results.</p>"
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
"type": "structure",
"members": {
"Licenses": {
"target": "com.amazonaws.licensemanager#GrantedLicenseList",
"traits": {
"smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": "<p>Token for the next set of results.</p>"
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
"type": "structure",
"members": {
"LicenseArns": {
"target": "com.amazonaws.licensemanager#ArnList",
"traits": {
```

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                "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
            }
          },

         "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>Status</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>IssuerName</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Beneficiary</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
              "smithy.api#documentation": "<p>Received license details.</p>"
            }
          },

          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
```

```
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventory": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FailedDependencyException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
    "type": "structure",
    "members": {
      "MaxResults": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
```

```
            },
            "NextToken": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanager#InventoryFilterList",
               "traits": {
                  "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n        <li>\n        <p>\n        <code>account_id</code>
- The ID of the Amazon Web Services account that owns the resource.\n        Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n
        </li>\n        <li>\n        <p>\n        <code>application_name</code> - The name of the
application. \n        Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n
    </li>\n        <li>\n        <p>\n        <code>license_included</code> - The type of license included. \n
        Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n        Possible values
are <code>sql-server-enterprise</code> | \n        <code>sql-server-standard</code> | \n        <code>sql-
server-web</code> |  \n        <code>windows-server-datacenter</code>.</p>\n        </li>\n        <li>\n
    <p>\n        <code>platform</code> - The platform of the resource.\n        Logical operators are
<code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n        </li>\n        <li>\n        <p>\n
      <code>resource_id</code> - The ID of the resource. \n        Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n        </li>\n        <li>\n        <p>\n
    <code>tag:<key></code> - The key/value combination of a tag assigned \n        to the resource. Logical
operators are <code>EQUALS</code> (single account) or\n        <code>EQUALS</code> |
<code>NOT_EQUALS</code> (cross account).</p>\n        </li>\n        </ul>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
         "type": "structure",
         "members": {
            "ResourceInventoryList": {
               "target": "com.amazonaws.licensemanager#ResourceInventoryList",
               "traits": {
                  "smithy.api#documentation": "<p>Information
 about the resources.</p>"
               }
            },
            "NextToken": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
           },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the tags for the specified license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",

      "smithy.api#required": {}
            }
          }
```

```
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>Information about the tags.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors":
[
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
      "type": "structure",
      "members": {
        "TokenIds": {
          "target": "com.amazonaws.licensemanager#StringList",
          "traits": {

            "smithy.api#documentation": "<p>Token IDs.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filter is supported:</p>\n
    <ul>\n        <li>\n        <p>\n        <code>LicenseArns</code>\n        </p>\n        </li>\n
</ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation":
 "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
      "type": "structure",
      "members": {
        "Tokens": {
          "target": "com.amazonaws.licensemanager#TokenList",
          "traits": {
            "smithy.api#documentation": "<p>Received token details.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
           {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying
license\n          consumption details by resource at a selected point in time. Use this action to audit the\n          current
license consumption for any license inventory and configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#Filters",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n       are supported:</p>\n       <ul>\n       <li>\n       <p>\n
<code>resourceArn</code> - The ARN of the license configuration resource.\n
        Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n       </li>\n
<li>\n       <p>\n       <code>resourceType</code> - The resource type
(<code>EC2_INSTANCE</code> | <code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>). \n       Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n       </li>\n       <li>\n       <p>\n
<code>resourceAccount</code> - The ID of the account that owns the resource. \n       Logical operators
are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n       </li>\n       </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {

 "LicenseConfigurationUsageList": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
```

```
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#Location": {
      "type": "string"
    },
    "com.amazonaws.licensemanager#Long": {
      "type": "long"
    },
    "com.amazonaws.licensemanager#ManagedResourceSummary": {
      "type": "structure",
      "members": {
        "ResourceType":
{
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
          }
        },
        "AssociationCount": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
      }
    },
    "com.amazonaws.licensemanager#ManagedResourceSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
      }
    },
    "com.amazonaws.licensemanager#MaxSize100": {
```

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"type": "integer",
    "traits": {
        "smithy.api#range": {
            "min": 1,
            "max": 100
        }
    }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 3
        }
    }
},
"com.amazonaws.licensemanager#Message": {
    "type": "string"
},
"com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The key name.</p>"
            }
        },

"Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The value.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
    }
},
"com.amazonaws.licensemanager#MetadataList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Metadata"
```

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        }
      },
      "com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement maximum count is reached.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },
      "com.amazonaws.licensemanager#Options": {
        "type": "structure",
        "members": {
          "ActivationOverrideBehavior": {
            "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
            "traits": {
              "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of activating a grant.\n Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter.</p>\n <ul>\n <li>\n <p>As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n </li>\n <li>\n <p>As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization.</p>\n </li>\n <li>\n <p>As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant.</p>\n </li>\n </ul>\n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n <p>Use this value to activate a grant without replacing any member accounts\n active grants for the same product.</p>\n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n <p>Use this value to activate a grant and disable other active grants in any\n member accounts\n for the same product. This action will also replace their\n previously activated grants with this activated grant.</p>\n </dd>\n </dl>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
      },
```

```
    "com.amazonaws.licensemanager#OrganizationConfiguration": {
      "type": "structure",
      "members": {
        "EnableIntegration": {
          "target": "com.amazonaws.licensemanager#Boolean",
          "traits": {
            "smithy.api#default": false,
            "smithy.api#documentation":
"<p>Enables Organizations integration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
      }
    },
    "com.amazonaws.licensemanager#PrincipalArnList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#Arn"
      },
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 1
        }
      }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
      "type": "structure",
      "members": {
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Resource type. The
possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductInformationFilterList": {
          "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
          "traits": {
            "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code> which specifies the type of filter being declared, and a
<code>ProductInformationFilterValue</code> that specifies the value to filter on. </p>\n        <p>Accepted values
for <code>ProductInformationFilterName</code> are listed here along with descriptions and valid options for
```

<code>ProductInformationFilterComparator</code>. \n The following filters and are supported when the resource type \n is <code>SSM_MANAGED</code>: \n
\n \n \n <code>Application Name</code> - The name of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Publisher</code> - The publisher of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Application Version</code> - The version of the application.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Name</code> - The name of the platform.\n Logical operator is <code>EQUALS</code>. \n \n \n \n <code>Platform Type</code> - The platform type.\n Logical operator is <code>EQUALS</code>. \n
\n \n \n <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>. The key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n \n \n \n \n <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n
The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n
<code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n
\n ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#documentation": " Describes product information for a license configuration. "
}
},
"com.amazonaws.licensemanager#ProductInformationFilter": {
"type": "structure",
"members": {
"ProductInformationFilterName": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Filter name. ",
"smithy.api#required": {}
}

```
        },
        "ProductInformationFilterValue": {
          "target": "com.amazonaws.licensemanager#StringList",

       "traits": {
            "smithy.api#documentation": "<p>Filter value.</p>"
          }
        },
        "ProductInformationFilterComparator": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Logical operator.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes product information filters.</p>"
      }
    },
    "com.amazonaws.licensemanager#ProductInformationFilterList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
      }
    },
    "com.amazonaws.licensemanager#ProductInformationList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
       }
    },
    "com.amazonaws.licensemanager#ProvisionalConfiguration": {
      "type": "structure",
      "members": {
        "MaxTimeToLiveInMinutes": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
      }
    },
    "com.amazonaws.licensemanager#RateLimitExceededException": {
```

```
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "RateLimitExceeded",
            "httpResponseCode": 429
          },
          "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 429
        }
      },
      "com.amazonaws.licensemanager#ReceivedMetadata": {
        "type": "structure",
        "members": {
          "ReceivedStatus": {
            "target": "com.amazonaws.licensemanager#ReceivedStatus",
            "traits": {
              "smithy.api#documentation": "<p>Received status.</p>"
            }
          },
          "ReceivedStatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
              "smithy.api#documentation": "<p>Received
 status reason.</p>"
            }
          },
          "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed operations.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
        }
      },
      "com.amazonaws.licensemanager#ReceivedStatus": {
        "type": "enum",
        "members": {
          "PENDING_WORKFLOW": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
          },
          "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue":
"PENDING_ACCEPT"
            }
          },
          "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "REJECTED"
            }
          },
          "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ACTIVE"
            }
          },
          "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
          },
          "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
          },
          "DISABLED": {
            "target": "smithy.api#Unit",
             "traits": {
              "smithy.api#enumValue": "DISABLED"
            }
          },
          "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
          }
```

```
        }
      },
      "com.amazonaws.licensemanager#RedirectException": {
        "type": "structure",
        "members": {
          "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
              "smithy.api#httpHeader": "Location"
            }
          },
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
           "smithy.api#error": "client",
          "smithy.api#httpError": 308
        }
      },
      "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target":
"com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}

}
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
```

```
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#RenewType":
{
        "type": "enum",
        "members": {
            "NONE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "None"
                }
            },
            "WEEKLY": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Weekly"
                }
            },
            "MONTHLY": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Monthly"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#ReportContext": {
        "type": "structure",
        "members": {
            "licenseConfigurationArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {

        "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that this
generator reports on.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportFrequency": {
        "type": "structure",
        "members": {
            "value": {
```

```
            "target": "com.amazonaws.licensemanager#Integer",
            "traits": {
              "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated.  \n        The only supported value is <code>1</code>.</p>"
            }
          },
          "period": {
            "target": "com.amazonaws.licensemanager#ReportFrequencyType",

           "traits": {
              "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
or monthly.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
        }
      },
      "com.amazonaws.licensemanager#ReportFrequencyType": {
        "type": "enum",
        "members": {
          "DAY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DAY"
            }
          },
          "WEEK": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "WEEK"
            }
          },
          "MONTH": {
            "target": "smithy.api#Unit",
            "traits":
{
              "smithy.api#enumValue": "MONTH"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ReportGenerator": {
        "type": "structure",
        "members": {
          "ReportGeneratorName": {
            "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Name of the report generator.</p>"
            }
        },
        "ReportType": {
            "target": "com.amazonaws.licensemanager#ReportTypeList",
            "traits": {
                "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
            }
        },
        "ReportContext": {
            "target": "com.amazonaws.licensemanager#ReportContext",
            "traits": {
                "smithy.api#documentation": "<p>License
configuration type for this generator.</p>"
            }
        },
        "ReportFrequency": {
            "target": "com.amazonaws.licensemanager#ReportFrequency",
            "traits": {
                "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
            }
        },
        "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
            }
        },
        "LastRunStatus": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
            }
        },
        "LastRunFailureReason":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
            }
        },
        "LastReportGenerationTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Time the last report was generated at.</p>"
            }
        },
```

```
            "ReportCreatorAccount": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
               }
            },
            "Description": {
               "target": "com.amazonaws.licensemanager#String",

         "traits": {
                  "smithy.api#documentation": "<p>Description of the report generator.</p>"
               }
            },
            "S3Location": {
               "target": "com.amazonaws.licensemanager#S3Location",
               "traits": {
                  "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
               }
            },
            "CreateTime": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Time the report was created.</p>"
               }
            },
            "Tags": {
               "target": "com.amazonaws.licensemanager#TagList",
               "traits": {
                  "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
               }

      }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
         }
      },
      "com.amazonaws.licensemanager#ReportGeneratorList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#ReportGenerator"
         }
      },
      "com.amazonaws.licensemanager#ReportGeneratorName": {
         "type": "string",
         "traits": {
```

```
            "smithy.api#length": {
              "min": 1,
              "max": 100
            }
          }
        },
        "com.amazonaws.licensemanager#ReportType": {
          "type": "enum",
          "members": {
            "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
              }

        },
            "LICENSE_CONFIGURATION_USAGE_REPORT": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "LicenseConfigurationUsageReport"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#ReportTypeList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#ReportType"
          }
        },
        "com.amazonaws.licensemanager#ResourceInventory": {
          "type": "structure",
          "members": {
            "ResourceId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>ID of the resource.</p>"
              }
            },
            "ResourceType": {
              "target": "com.amazonaws.licensemanager#ResourceType",
              "traits":
{
                "smithy.api#documentation": "<p>Type of resource.</p>"
              }
            },
            "ResourceArn": {
              "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
          },
          "Platform": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Platform of the resource.</p>"
            }
          },
          "PlatformVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
            }
          },
          "ResourceOwningAccountId":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a resource.</p>"
        }
      },
      "com.amazonaws.licensemanager#ResourceInventoryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#ResourceInventory"
        }
      },
      "com.amazonaws.licensemanager#ResourceLimitExceededException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",

           "httpResponseCode": 400
          },
          "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
```

```
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#ResourceNotFoundException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "InvalidResource.NotFound",
          "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#ResourceType": {
      "type": "enum",
       "members": {
        "EC2_INSTANCE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EC2_INSTANCE"
          }
        },
        "EC2_HOST": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EC2_HOST"
          }
        },
        "EC2_AMI": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EC2_AMI"
          }
        },
        "RDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "RDS"
          }
        },
```

```
            "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#S3Location": {
          "type": "structure",
          "members": {
            "bucket": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Name of the S3 bucket reports are published to.</p>"
              }
            },
            "keyPrefix": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
          }
        },
        "com.amazonaws.licensemanager#ServerInternalException": {
          "type": "structure",
          "members": {
            "Message": {
              "target": "com.amazonaws.licensemanager#Message"
            }
          },
          "traits": {
            "aws.protocols#awsQueryError": {
              "code": "InternalError",
              "httpResponseCode": 500
            },
            "smithy.api#documentation": "<p>The server experienced an internal error. Try again.</p>",
            "smithy.api#error": "server",
            "smithy.api#httpError": 500
          }
        },
        "com.amazonaws.licensemanager#SignedToken": {
          "type": "string",
```

```
      "traits": {
        "smithy.api#length": {
          "min": 4096
        }
      }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
      "type": "string",
      "traits":
{
        "smithy.api#length": {
          "min": 0,
          "max": 400
        },
        "smithy.api#pattern": "^[\\s\\S]+$"
      }
    },
    "com.amazonaws.licensemanager#String": {
      "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#String"
      }
    },
    "com.amazonaws.licensemanager#Tag": {
      "type": "structure",
      "members": {
        "Key": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Tag key.</p>"
          }
        },
        "Value": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation":
"<p>Tag value.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about a tag for a license configuration.</p>"
      }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
```

```
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Tag"
        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
          {
            "target":
"com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Adds the specified tags to the specified license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits":
```

```
{
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                "smithy.api#required": {}
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanager#TagList",
              "traits": {
                "smithy.api#documentation": "<p>One or more tags.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#TagResourceResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#TokenData": {
          "type": "structure",
          "members": {
            "TokenId": {
              "target": "com.amazonaws.licensemanager#String",
               "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
              }
            },
            "TokenType": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
              }
            },
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
              }
            },
            "ExpirationTime": {
```

```
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC
 format.</p>"
            }
          },
          "TokenProperties": {
            "target": "com.amazonaws.licensemanager#MaxSize3StringList",
            "traits": {
              "smithy.api#documentation": "<p>Data specified by the caller.</p>"
            }
          },
          "RoleArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
            }
          }
        },
        "traits": {

          "smithy.api#documentation": "<p>Describes a token.</p>"
        }
      },
      "com.amazonaws.licensemanager#TokenList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#TokenData"
        }
      },
      "com.amazonaws.licensemanager#TokenString": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 4096
          },
          "smithy.api#pattern": "^\\S+$"
        }
      },
```

```
    "com.amazonaws.licensemanager#TokenType": {
      "type": "enum",
      "members": {
        "REFRESH_TOKEN": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "REFRESH_TOKEN"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException":
{
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#UntagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
```

```
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                     "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanager#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
        },
        "output": {

 "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
        },
        "errors": [
```

```
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
          "type": "structure",
          "members": {
            "LicenseConfigurationArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                "smithy.api#required": {}
              }
            },
            "LicenseConfigurationStatus": {
              "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
              "traits": {
                "smithy.api#documentation": "<p>New status of the license configuration.</p>"
              }
            },
            "LicenseRules": {
              "target": "com.amazonaws.licensemanager#StringList",
              "traits": {

 "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a license\n
 configuration is licenseAffinityToHost.</p>"
              }
            },
```

```
            "LicenseCount": {
              "target": "com.amazonaws.licensemanager#BoxLong",
              "traits": {
                "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
              }
            },
            "LicenseCountHardLimit": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
              }
            },
            "Name": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>New name
 of the license configuration.</p>"
              }
            },
            "Description": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>New description of the license configuration.</p>"
              }
            },
            "ProductInformationList": {
              "target": "com.amazonaws.licensemanager#ProductInformationList",
              "traits": {
                "smithy.api#documentation": "<p>New product information.</p>"
              }
            },
            "DisassociateWhenNotFound": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
              }
            }
          },
          "traits":
 {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
          "type": "structure",
          "members": {},
```

```
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates a report generator.</p>\n         <p>After you make changes to a
report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest":
{
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
              "smithy.api#required": {}
            }
          },
          "ReportGeneratorName": {
            "target": "com.amazonaws.licensemanager#ReportGeneratorName",
            "traits": {
              "smithy.api#documentation": "<p>Name of the report generator.</p>",
              "smithy.api#required": {}
            }
          },
          "Type": {
            "target": "com.amazonaws.licensemanager#ReportTypeList",
            "traits": {
              "smithy.api#documentation":
 "<p>Type of reports to generate. The following report types are supported:</p>\n        <ul>\n        <li>\n <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n        </li>\n        <li>\n        <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n        </li>\n        </ul>",
              "smithy.api#required": {}
            }
          },
          "ReportContext": {
            "target": "com.amazonaws.licensemanager#ReportContext",
            "traits": {
              "smithy.api#documentation": "<p>The report context.</p>",
              "smithy.api#required": {}
            }
          },
          "ReportFrequency": {
            "target": "com.amazonaws.licensemanager#ReportFrequency",
            "traits":
 {
              "smithy.api#documentation": "<p>Frequency by which reports are generated.</p>",
              "smithy.api#required": {}
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientRequestToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          },
```

```
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the report generator.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse":
{
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },

            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified Amazon Web Services resource.</p>\n            <p>You can update the license specifications of AMIs, instances, and hosts.\n            You cannot update the license specifications for launch templates and CloudFormation templates, \n            as they send license configurations to the operation that creates the resource.</p>"
        }
    },

    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation":
"<p>ARNs of the license configurations to remove.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettings": {
```

```
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where
the License
 Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used
for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
            }
        },
        "EnableCrossAccountsDiscovery": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"

      }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#UsageOperation": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        }
      }
    },
    "com.amazonaws.licensemanager#ValidationException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",

     "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    }
  }
```

```
}
CheckoutLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
```

1.124 procfs 0.16.1

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1.125 github.com/confluentinc/confluent-kafka-go/v2 2.10.0

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librdkafka - Apache Kafka C driver library

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*/

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parts of src/rdfnv1a.c: http://www.isthe.com/chongo/src/fnv/hash_32a.c

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at revision 3a0bb77429bd3a61596f5e8a3172445844342120

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1.126 golang 1.24.3

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```
package copyright

import (
 "bytes"
 "internal/testenv"
 "io"
 "io/fs"
 "os"
 "path/filepath"
 "testing"
)

var copyright = []byte("Copyright")

var permitted = [][]byte{
 []byte("// Code generated by "),
 []byte("// Code generated from "),
 []byte("// Created by cgo -cdefs"),
 []byte("// DO NOT EDIT\n// generated by:"),
 []byte("// Empty assembly file"),
 []byte("// Generated using cgo"),
 []byte("// Original source:\n//\thttp://www.zorinaq.com/papers/md5-amd64.html"), // public domain crypto/md5
 []byte("// created by cgo -cdefs"),
 []byte("// go run mkasm.go"),
 []byte("// mkerrors"),
 []byte("// mksys"),
 []byte("// run\n// Code generated by"), // cmd/compile/internal/test/constFold_test.go
}

func TestCopyright(t *testing.T) {
 buf := make([]byte, 2048)
 filepath.WalkDir(filepath.Join(testenv.GOROOT(t), "src"), func(path string,
 d fs.DirEntry, err error) error {
  if d.IsDir() && (d.Name() == "testdata" || d.Name() == "vendor") {
   return filepath.SkipDir
  }
  switch filepath.Ext(d.Name()) {
  default:
   return nil
  case ".s", ".go":
   // check
  }

  f, err := os.Open(path)
  if err != nil {
   t.Error(err)
   return nil
  }
```

```
 defer f.Close()
 n, err := f.Read(buf)
 if err != nil && err != io.EOF {
  t.Error(err)
  return nil
 }
 b := buf[:n]
 if bytes.Contains(b, copyright) {
  return nil
 }
 for _, ok := range permitted {
  if bytes.HasPrefix(b, ok) {
   return nil
  }
 }
 t.Errorf("%s: missing copyright notice", path)
 return nil
})
}
```

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1.127 github.com/aws/aws-sdk-go-v2/feature/dynamodb/attributevalue 1.19.0

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import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
```

```
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense
```

```
 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
```

```
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
```

```
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
```

```
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }} ${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
      uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
```

SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop

```
 Retry
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
```

```
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
```

```
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
```

```
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
```

```
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
```

```
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License
```

```
 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
```

```
 return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
 err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
```

RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger


```
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpResponseCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
      },
      {
        "id": "Service",
        "namespace": "*"
      }
    ]
  },
```

```
"shapes": {
   "com.amazonaws.licensemanager#AWSLicenseManager": {
      "type": "service",
      "version": "2018-08-01",
      "operations": [
         {
            "target": "com.amazonaws.licensemanager#AcceptGrant"
         },

{
            "target": "com.amazonaws.licensemanager#CheckInLicense"
         },
         {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
         },
         {
            "target": "com.amazonaws.licensemanager#CheckoutLicense"
         },
         {
            "target": "com.amazonaws.licensemanager#CreateGrant"
         },
         {
            "target": "com.amazonaws.licensemanager#CreateGrantVersion"
         },
         {
            "target": "com.amazonaws.licensemanager#CreateLicense"
         },
         {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
         },
         {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
         },
         {
            "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
          },
         {
            "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
         },
         {
            "target": "com.amazonaws.licensemanager#CreateToken"
         },
         {
            "target": "com.amazonaws.licensemanager#DeleteGrant"
         },
         {
            "target": "com.amazonaws.licensemanager#DeleteLicense"
         },
```

```
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
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      "target": "com.amazonaws.licensemanager#GetServiceSettings"
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      "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
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    {
      "target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
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            "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
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            "arnNamespace": "license-manager",
            "cloudFormationName": "LicenseManager",
            "cloudTrailEventSource": "license-manager.amazonaws.com",
            "endpointPrefix": "license-manager"
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            "name": "license-manager"
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          "aws.protocols#awsJson1_1": {},
          "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software vendors across multiple \n         Amazon Web Services accounts and on-premises servers.</p>",
          "smithy.api#title": "AWS License Manager",
          "smithy.api#xmlNamespace": {
            "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
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                "required": false,
                "documentation": "The AWS region used to dispatch the request.",
                "type": "String"
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                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
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            "documentation": "When true,
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            "type": "Boolean"
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            "type": "String"
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                "type": "error"
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                "argv": [
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              {
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                  },
                  true
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                                          "ref": "PartitionResult"
                                        },
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                                      ]

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                        "headers": {}
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            "type": "error"
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                            "argv": [
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                              },
                              "supportsDualStack"
                            ]

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                            "headers": {}
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                          "type": "endpoint"
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                            "headers": {}
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        "type": "error"
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        "url": "https://license-manager.ap-northeast-2.amazonaws.com"
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      "params": {
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        "UseDualStack": false
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        "UseFIPS": false,
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            "params": {
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              "UseDualStack": false
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        "UseFIPS": false,
        "UseDualStack": false
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        "UseDualStack": false
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      "params": {
        "Region": "eu-west-2",
        "UseFIPS": false,
        "UseDualStack": false
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    },
    {
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"UseDualStack": false
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        "UseDualStack": false
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      "params": {
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                "UseDualStack": false
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            "params": {
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                "UseDualStack": false
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            "params": {
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                "UseDualStack": false
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us-west-1 with FIPS disabled and DualStack disabled",
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            "UseFIPS": false,
            "UseDualStack": true
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          "expect": {
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"https://license-manager.cn-north-1.amazonaws.com.cn"
            }
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            "Region": "cn-north-1",
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            "UseDualStack": false
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        {
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          "expect": {
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          },
          {
            "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.us-gov-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-gov-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
              }
            },
            "params": {
              "Region": "us-iso-east-1",
              "UseFIPS": false,
              "UseDualStack": false
```

```
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
         "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled
but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
```

```
            "UseDualStack": false
          }
        },

        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },

    "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

"expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
```

```
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,

    "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error":
 "Invalid Configuration: Dualstack and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true,
        "Endpoint": "https://example.com"
      }
    },
    {
```

```
                    "documentation": "Missing region",
                    "expect": {
                        "error": "Invalid Configuration: Missing Region"
                    }
                }
            ],
            "version": "1.0"
        }
    },
    "com.amazonaws.licensemanager#AcceptGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
        "output": {
            "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"

    }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest": {
```

```
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant
ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#AccessDeniedException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
```

```
      "traits": {
        "aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
          "httpResponseCode": 401
        },
        "smithy.api#documentation": "<p>Access to resource denied.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 401
      }
    },
    "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
      "type": "enum",
      "members": {
        "DISTRIBUTED_GRANTS_ONLY": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
          }
        },
        "ALL_GRANTS_PERMITTED_BY_ISSUER": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#AllowedOperation": {

    "type": "enum",
      "members": {
        "CREATE_GRANT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "CreateGrant"
          }
        },
        "CHECKOUT_LICENSE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "CheckoutLicense"
          }
        },
        "CHECKOUT_BORROW_LICENSE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "CheckoutBorrowLicense"
```

```
            }
          },
          "CHECK_IN_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckInLicense"
            }
          },
          "EXTEND_CONSUMPTION_LICENSE":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ExtendConsumptionLicense"
            }
          },
          "LIST_PURCHASED_LICENSES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ListPurchasedLicenses"
            }
          },
          "CREATE_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CreateToken"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#AllowedOperationList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#AllowedOperation"
        },
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max":
8
          }
        }
      },
      "com.amazonaws.licensemanager#Arn": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 2048
```

```
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
        }
    },
    "com.amazonaws.licensemanager#ArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError":
{
                "code": "AuthorizationFailure",
                "httpResponseCode": 403
            },
            "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n        policy associated with this account.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
    },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
```

```
            "smithy.api#default": false
        }
    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
            "AllowEarlyCheckIn": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxTimeToLiveInMinutes": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                    "smithy.api#required": {}
                }
            }

},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanager#AuthorizationException"

            },
                {
                    "target": "com.amazonaws.licensemanager#ConflictException"
                },
                {
                    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
                },
                {
                    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ServerInternalException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ValidationException"
                }
            ],
            "traits": {
                "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
            }
        },
        "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
            "type": "structure",
            "members": {
                "LicenseConsumptionToken": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>License consumption token.</p>",
                        "smithy.api#required": {}
                    }
                },
                "Beneficiary": {
                    "target": "com.amazonaws.licensemanager#String",
                    "traits": {
                        "smithy.api#documentation": "<p>License beneficiary.</p>"
                    }
                }
            },
            "traits": {
                "smithy.api#input": {}
            }
```

```
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
        },
        {

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
{
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n         For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
                }
            },
            "CheckoutMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Information about constraints.</p>"
                }
```

```
            },
            "ClientToken": {
               "target": "com.amazonaws.licensemanager#ClientToken",
               "traits": {
                  "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
         "type": "structure",
         "members": {
            "LicenseArn": {
               "target": "com.amazonaws.licensemanager#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
               }
            },
            "LicenseConsumptionToken": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>License consumption token.</p>"
               }
            },
            "EntitlementsAllowed":
{
               "target": "com.amazonaws.licensemanager#EntitlementDataList",
               "traits": {
                  "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
               }
            },
            "NodeId": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Node ID.</p>"
               }
            },
            "SignedToken": {
               "target": "com.amazonaws.licensemanager#SignedToken",
               "traits": {
                  "smithy.api#documentation": "<p>Signed token.</p>"
               }
            },
```

```
            "IssuedAt": {
               "target": "com.amazonaws.licensemanager#ISO8601DateTime",
               "traits": {
                  "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
               }
            },
            "Expiration": {
               "target": "com.amazonaws.licensemanager#ISO8601DateTime",
               "traits": {
                  "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
               }
            },
            "CheckoutMetadata": {
               "target": "com.amazonaws.licensemanager#MetadataList",
               "traits": {
                  "smithy.api#documentation": "<p>Information about constraints.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanager#CheckoutLicense": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
          },
         "errors": [
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
```

```
            {
              "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target":
 "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n        <p>If the
 account that created the license is the same that is performing the check out, you must\n        specify the account
 as the beneficiary.</p>\n        </note>"
          }
        },
        "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
          "type": "structure",
          "members": {
            "ProductSKU": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Product
 SKU.</p>",
                "smithy.api#required": {}
              }
            },
            "CheckoutType": {
              "target": "com.amazonaws.licensemanager#CheckoutType",
              "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>",
                "smithy.api#required": {}
              }
            },
            "KeyFingerprint": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                "smithy.api#required": {}
              }
            },
```

```
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementDataList",
          "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>",

      "smithy.api#required": {}
          }
        },
        "ClientToken": {
          "target": "com.amazonaws.licensemanager#ClientToken",
          "traits": {
            "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
            "smithy.api#required": {}
          }
        },
        "Beneficiary": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License beneficiary.</p>"
          }
        },
        "NodeId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Node ID.</p>"
          }
        }
      },
      "traits": {

      "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseResponse": {
      "type": "structure",
      "members": {
        "CheckoutType": {
          "target": "com.amazonaws.licensemanager#CheckoutType",
          "traits": {
            "smithy.api#documentation": "<p>Checkout type.</p>"
          }
        },
        "LicenseConsumptionToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License consumption token.</p>"
          }
```

```
            },
            "EntitlementsAllowed": {
               "target": "com.amazonaws.licensemanager#EntitlementDataList",
               "traits": {
                  "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
               }
            },
             "SignedToken": {
               "target": "com.amazonaws.licensemanager#SignedToken",
               "traits": {
                  "smithy.api#documentation": "<p>Signed token.</p>"
               }
            },
            "NodeId": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Node ID.</p>"
               }
            },
            "IssuedAt": {
               "target": "com.amazonaws.licensemanager#ISO8601DateTime",
               "traits": {
                  "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
               }
            },
            "Expiration": {
               "target": "com.amazonaws.licensemanager#ISO8601DateTime",
               "traits": {
                  "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
               }
            },
            "LicenseArn": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanager#CheckoutType": {
         "type": "enum",
         "members": {
            "PROVISIONAL": {
               "target": "smithy.api#Unit",
```

```
            "traits": {
              "smithy.api#enumValue": "PROVISIONAL"
            }
          },
          "PERPETUAL": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PERPETUAL"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ClientRequestToken": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 36
          }
        }
      },
      "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 2048
          },
          "smithy.api#pattern": "^\\S+$"
        }
      },
      "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "ConflictException",
            "httpResponseCode":
409
          },
          "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 409
```

```
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
                }
            },
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },

"traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
            "RenewType": {
                "target": "com.amazonaws.licensemanager#RenewType",
                "traits": {
                    "smithy.api#documentation": "<p>Renewal frequency.</p>"
                }
            },
            "ProvisionalConfiguration": {
                "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
                 }
            },
            "BorrowConfiguration": {
                "target": "com.amazonaws.licensemanager#BorrowConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target":
 "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
 license\n            entitlements with a specific Amazon Web Services account, an organization, or an\n
 organizational unit (OU). For more
  information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
 licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateGrantRequest": {
```

```
        "type": "structure",
        "members": {
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          },
          "GrantName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant name.</p>",
              "smithy.api#required": {}

    }
          },
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          },
          "Principals": {
            "target": "com.amazonaws.licensemanager#PrincipalArnList",
            "traits": {
              "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an
Amazon Resource Name\n        (ARN):</p>\n        <ul>\n        <li>\n        <p>An Amazon Web Services
account, which includes only the account specified.</p>\n        </li>\n        </ul>\n        <ul>\n        <li>\n
    <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n        </li>\n        </ul>\n
<ul>\n
        <li>\n        <p>An organization, which will include all accounts across your organization.</p>\n
</li>\n        </ul>",
              "smithy.api#required": {}
            }
          },
          "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Home Region of the grant.</p>",
              "smithy.api#required": {}
            }
          },
          "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                "smithy.api#required": {}
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanager#TagList",

           "traits": {
                "smithy.api#documentation": "<p>Tags to add to the grant. For more information about tagging
support in\n        License Manager, see the <a href=\"https://docs.aws.amazon.com/license-
manager/latest/APIReference/API_TagResource.html\">TagResource</a> operation.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#CreateGrantResponse": {
          "type": "structure",
          "members": {
            "GrantArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanager#GrantStatus",
              "traits": {
                "smithy.api#documentation":
 "<p>Grant status.</p>"
              }
            },
            "Version": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#CreateGrantVersion": {
          "type": "operation",
          "input": {
```

```
            "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information,
see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"

        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          },
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
```

```
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
          "smithy.api#required": {}
        }
      },
      "GrantName": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {

    "smithy.api#documentation": "<p>Grant name.</p>"
        }
      },
      "AllowedOperations": {
        "target": "com.amazonaws.licensemanager#AllowedOperationList",
        "traits": {
          "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
        }
      },
      "Status": {
        "target": "com.amazonaws.licensemanager#GrantStatus",
        "traits": {
          "smithy.api#documentation": "<p>Grant status.</p>"
        }
      },
      "StatusReason": {
        "target": "com.amazonaws.licensemanager#StatusReasonMessage",
        "traits": {
          "smithy.api#documentation": "<p>Grant status reason.</p>"
        }
      },
      "SourceVersion": {
        "target": "com.amazonaws.licensemanager#String",
         "traits": {
          "smithy.api#documentation": "<p>Current version of the grant.</p>"
        }
      },
      "Options": {
        "target": "com.amazonaws.licensemanager#Options",
        "traits": {
          "smithy.api#documentation": "<p>The options specified for the grant.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#CreateGrantVersionResponse": {
```

```
    "type": "structure",
    "members": {
      "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Grant ARN.</p>"
        }
      },
      "Status": {
        "target": "com.amazonaws.licensemanager#GrantStatus",
         "traits": {
          "smithy.api#documentation": "<p>Grant status.</p>"
        }
      },
      "Version": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>New version of the grant.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },

      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
```

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            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a license.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
        "type": "operation",
        "input": {

    "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }

        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a license configuration.</p>\n            <p>A license configuration is an abstraction of a customer license agreement that can be\n            consumed and enforced by License Manager. Components include specifications for the license\n            type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n            Dedicated Instance, Dedicated Host, or all of these), license affinity  to
```

```
host (how long a \n        license must be associated with a host), and the number of licenses purchased and
used.</p>"
          }
      },
      "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
         "type": "structure",
         "members": {
            "Name": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                   "smithy.api#required": {}
               }
            },
            "Description": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Description of the license configuration.</p>"
               }
            },
            "LicenseCountingType": {
               "target": "com.amazonaws.licensemanager#LicenseCountingType",
               "traits": {
                  "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                  "smithy.api#required": {}
               }
            },
            "LicenseCount": {
               "target": "com.amazonaws.licensemanager#BoxLong",
               "traits": {
                  "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"

  }
            },
            "LicenseCountHardLimit": {
               "target": "com.amazonaws.licensemanager#BoxBoolean",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
               }
            },
            "LicenseRules": {
               "target": "com.amazonaws.licensemanager#StringList",
               "traits": {
                  "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n          <li>\n             <p>\n                <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
          <code>licenseAffinityToHost</code> |\n             <code>maximumCores</code> |
```

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<code>minimumCores</code>\n
            </p>\n            </li>\n            <li>\n            <p>\n                <code>Instances</code> dimension:
<code>allowedTenancy</code> | \n                <code>maximumVcpus</code> | <code>minimumVcpus</code>\n
        </p>\n            </li>\n            <li>\n            <p>\n                <code>Sockets</code> dimension:
<code>allowedTenancy</code> | \n                <code>licenseAffinityToHost</code> |\n
<code>maximumSockets</code> | <code>minimumSockets</code>\n                </p>\n            </li>\n            <li>\n
        <p>\n                <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n                <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n                </p>\n            </li>\n        </ul>\n        <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code>
 are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n        <code>EC2-
DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
                }
            },
            "DisassociateWhenNotFound": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
                }
            },
            "ProductInformationList": {
                "target": "com.amazonaws.licensemanager#ProductInformationList",
                 "traits": {
                    "smithy.api#documentation": "<p>Product information.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
```

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            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],

      "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
          }
        },
        "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                "smithy.api#required": {}
```

```
            }
          },
          "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n  For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert
 a license type using the CLI </a> in the <i>License Manager User Guide</i>.</p>",
              "smithy.api#required": {}
            }
          },
          "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
```

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        },
        "errors":
[
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }

    ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
          "ReportGeneratorName": {
            "target": "com.amazonaws.licensemanager#ReportGeneratorName",
            "traits": {
              "smithy.api#documentation": "<p>Name of the report generator.</p>",
              "smithy.api#required": {}
            }
          },
          "Type": {
            "target": "com.amazonaws.licensemanager#ReportTypeList",
            "traits": {
              "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be
generated:</p>\n        <ul>\n          <li>\n            <p>License configuration report - Reports the number and
```

details
of consumed licenses for a license configuration. \n \n \n Resource report -
Reports the tracked licenses and resource consumption for a license configuration. \n \n ",
"smithy.api#required": {}
}
},
"ReportContext": {
"target": "com.amazonaws.licensemanager#ReportContext",
"traits": {
"smithy.api#documentation": " Defines the type of license configuration the report generator
tracks. ",
"smithy.api#required": {}
}
},
"ReportFrequency": {
"target": "com.amazonaws.licensemanager#ReportFrequency",
"traits": {
"smithy.api#documentation": " Frequency by which reports are generated. Reports can be
generated daily, monthly, or
weekly. ",
"smithy.api#required": {}
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientRequestToken",
"traits": {
"smithy.api#documentation": " Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request. ",
"smithy.api#required": {}
}
},
"Description": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Description of the report generator. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanager#TagList",
"traits": {
"smithy.api#documentation": " Tags to add to the report generator. "
}
}
},
"traits": {
"smithy.api#input": {}
}

```
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
      "type": "structure",
      "members": {
        "LicenseManagerReportGeneratorArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
generator.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseRequest": {
      "type": "structure",
      "members": {
        "LicenseName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation":
"<p>License name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductSKU": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product SKU.</p>",
            "smithy.api#required": {}
          }
        },
        "Issuer": {
          "target": "com.amazonaws.licensemanager#Issuer",
          "traits": {
            "smithy.api#documentation": "<p>License issuer.</p>",
            "smithy.api#required": {}
```

```
  }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region for the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
            "smithy.api#required": {}
          }
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
          "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>",
            "smithy.api#required": {}

    }
        },
        "Beneficiary": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License beneficiary.</p>",
            "smithy.api#required": {}
          }
        },
        "ConsumptionConfiguration": {
          "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n          usage.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",

   "traits": {
            "smithy.api#documentation": "<p>Information about the license.</p>"
          }
        },
```

```
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Tags to add to the license. For more information about tagging support in\n        License Manager, see the <a href=\"https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html\">TagResource</a> operation.</p>"
                }
            }

        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }

        },
        "traits": {
            "smithy.api#output": {}
        }
```

```
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
   "type": "operation",
   "input": {
      "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
   },
   "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
   },
   "errors": [
      {
         "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
         "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
         "target": "com.amazonaws.licensemanager#ConflictException"
      },
      {
         "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
         "target": "com.amazonaws.licensemanager#RedirectException"
       },
      {
         "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
         "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
         "target": "com.amazonaws.licensemanager#ValidationException"
      }
   ],
   "traits": {
      "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
   }
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
   "type": "structure",
   "members": {
      "LicenseArn": {
         "target": "com.amazonaws.licensemanager#Arn",
         "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required":
```

```
{}
            }
          },
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product name.</p>",
              "smithy.api#required": {}
            }
          },
          "Issuer": {
            "target": "com.amazonaws.licensemanager#Issuer",
            "traits": {
              "smithy.api#documentation": "<p>License issuer.</p>",
              "smithy.api#required": {}
            }
          },
          "HomeRegion": {

 "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Home Region of the license.</p>",
              "smithy.api#required": {}
            }
          },
          "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
              "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license.</p>"
            }
          },
          "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
```

```
            "traits": {
              "smithy.api#documentation": "<p>License entitlements.</p>",
              "smithy.api#required": {}
            }
          },
          "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for workloads with offline\n          usage.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>",

 "smithy.api#required": {}
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          },
          "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the license.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
          "LicenseArn": {

      "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
```

```
            "smithy.api#documentation": "<p>License ARN.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>New version of the license.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseStatus",
          "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CreateToken": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateTokenRequest"
       },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateTokenResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
```

```
                "target": "com.amazonaws.licensemanager#ServerInternalException"

            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n         <p>A refresh token is a JWT token used to get an access token. With an access token,\n          you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n          call License Manager to manage the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n          JWT token.</p>",
                    "smithy.api#required":
{}
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n          License Manager does not check whether the roles are in use.</p>"
                }
            },
            "ExpirationInDays": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
                    "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The default is 365 days.</p>"
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT token. The data is mapped\n          to the amr claim of the JWT token.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateTokenResponse": {
    "type": "structure",
    "members": {
        "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token ID.</p>"
            }
        },
        "TokenType": {
            "target": "com.amazonaws.licensemanager#TokenType",
             "traits": {
                "smithy.api#documentation": "<p>Token type.</p>"
            }
        },
        "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DateTime": {
    "type": "timestamp"
},
"com.amazonaws.licensemanager#DatetimeRange": {
    "type": "structure",
    "members": {
        "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Start of the time range.</p>",
                "smithy.api#required":
```

```
{}
            }
          },
          "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>End of the time range.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
        }
      },
      "com.amazonaws.licensemanager#DeleteGrant": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes the specified grant.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#DeleteGrantRequest": {
      "type": "structure",
      "members": {
        "GrantArn": {

     "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
          }
        },
        "StatusReason": {
          "target": "com.amazonaws.licensemanager#StatusReasonMessage",
          "traits": {
            "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Current version of the grant.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse":
{
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicense":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
           },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
      },
```

```
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n      <p>You cannot delete a license configuration that is in use.</p>"
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
      "type": "structure",
      "members": {
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>ID of the license configuration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
      "type": "structure",
```

```
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {

             "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n          <p>This action
deletes
 the report generator, which stops it from generating future reports.\n          The action cannot be reversed. It has no
effect on the previous reports from this generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
```

```
        "type": "structure",
        "members": {
          "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be
deleted.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {

          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          },
          "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the license.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseResponse": {
```

```
 "type": "structure",
   "members": {
      "Status": {
         "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
         "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
         }
      },
      "DeletionDate": {
         "target": "com.amazonaws.licensemanager#ISO8601DateTime",
         "traits": {
            "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
         }
      }
   },
   "traits": {
      "smithy.api#output": {}
   }
},
"com.amazonaws.licensemanager#DeleteToken": {
   "type": "operation",
   "input": {
      "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
   },
   "output": {
      "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
    },
   "errors": [
      {
         "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
         "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
         "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
         "target": "com.amazonaws.licensemanager#RedirectException"
      },
      {
         "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
         "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
         "target": "com.amazonaws.licensemanager#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token.
Must be called in the license home Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "enum",
        "members": {
            "JWT_PS384": {
                "target": "smithy.api#Unit",

                "traits": {
                    "smithy.api#enumValue": "JWT_PS384"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#Entitlement": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement name.</p>",
```

```
                "smithy.api#required": {}
              }
            },
            "Value": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement resource. Use only if the unit is None.</p>"
              }
            },
            "MaxCount": {
              "target": "com.amazonaws.licensemanager#Long",
              "traits": {
                "smithy.api#documentation":
"<p>Maximum entitlement count. Use if the unit is not None.</p>"
              }
            },
            "Overage": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
              }
            },
            "Unit": {
              "target": "com.amazonaws.licensemanager#EntitlementUnit",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement unit.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowCheckIn": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
              }
            }

        },
        "traits": {
          "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
        }
      },
      "com.amazonaws.licensemanager#EntitlementData": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement data name.</p>",
```

```
                "smithy.api#required": {}
              }
            },
            "Value": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement data value.</p>"
              }
            },
            "Unit": {
              "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
              "traits": {

   "smithy.api#documentation": "<p>Entitlement data unit.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
          }
        },
        "com.amazonaws.licensemanager#EntitlementDataList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
          }
        },
        "com.amazonaws.licensemanager#EntitlementDataUnit": {
          "type": "enum",
          "members": {
            "COUNT": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Count"
              }
            },
            "NONE": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue":
   "None"
              }
            },
            "SECONDS": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Seconds"
```

```
            }
        },
        "MICROSECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Microseconds"
            }
        },
        "MILLISECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Milliseconds"
            }
        },
        "BYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes"
            }
        },
        "KILOBYTES": {
            "target": "smithy.api#Unit",

"traits": {
                "smithy.api#enumValue": "Kilobytes"
            }
        },
        "MEGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Megabytes"
            }
        },
        "GIGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Gigabytes"
            }
        },
        "TERABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabytes"
            }
        },
        "BITS": {
            "target": "smithy.api#Unit",
            "traits": {
```

```
            "smithy.api#enumValue": "Bits"
          }
        },
        "KILOBITS": {

      "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits"
          }
        },
        "MEGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabits"
          }
        },
        "GIGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits"
          }
        },
        "TERABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits"
          }
        },
        "PERCENT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Percent"
          }

      },
        "BYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bytes/Second"
          }
        },
        "KILOBYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobytes/Second"
          }
        },
        "MEGABYTES_PER_SECOND": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Megabytes/Second"
            }
          },
          "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Gigabytes/Second"
            }
          },
          "TERABYTES_PER_SECOND": {
            "target":
"smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Terabytes/Second"
            }
          },
          "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Bits/Second"
            }
          },
          "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Kilobits/Second"
            }
          },
          "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Megabits/Second"
            }
          },
          "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue":
"Gigabits/Second"
            }
          },
          "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Terabits/Second"
            }
```

```
        },
        "COUNT_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Count/Second"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#EntitlementList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#Entitlement"
      }
    },
    "com.amazonaws.licensemanager#EntitlementNotAllowedException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }

     },
      "traits": {
        "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#EntitlementUnit": {
      "type": "enum",
      "members": {
        "COUNT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Count"
          }
        },
        "NONE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "None"
          }
        },
        "SECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Seconds"
```

```
        }
    },
    "MICROSECONDS": {

      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Microseconds"
      }
    },
    "MILLISECONDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Milliseconds"
      }
    },
    "BYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Bytes"
      }
    },
    "KILOBYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Kilobytes"
      }
    },
    "MEGABYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Megabytes"

}
    },
    "GIGABYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Gigabytes"
      }
    },
    "TERABYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Terabytes"
      }
    },
    "BITS": {
      "target": "smithy.api#Unit",
```

```
            "traits": {
              "smithy.api#enumValue": "Bits"
            }
          },
          "KILOBITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Kilobits"
            }
          },
          "MEGABITS": {
            "target": "smithy.api#Unit",
            "traits": {

        "smithy.api#enumValue": "Megabits"
            }
          },
          "GIGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Gigabits"
            }
          },
          "TERABITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Terabits"
            }
          },
          "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Percent"
            }
          },
          "BYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Bytes/Second"
            }
          },
          "KILOBYTES_PER_SECOND": {
            "target":
    "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Kilobytes/Second"
            }
          },
```

```
        "MEGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabytes/Second"
          }
        },
        "GIGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes/Second"
          }
        },
        "TERABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabytes/Second"
          }
        },
        "BITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {

"smithy.api#enumValue": "Bits/Second"
          }
        },
        "KILOBITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits/Second"
          }
        },
        "MEGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabits/Second"
          }
        },
        "GIGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits/Second"
          }
        },
        "TERABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits/Second"
          }
```

```
        },

        "COUNT_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Count/Second"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#EntitlementUsage": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Entitlement usage name.</p>",
            "smithy.api#required": {}
          }
        },
        "ConsumedValue": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Resource usage consumed.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxCount":
{
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
          }
        },
        "Unit": {
          "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
          "traits": {
            "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
      }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList": {
      "type": "list",
```

```
        "member": {
          "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
      },
      "com.amazonaws.licensemanager#ExtendLicenseConsumption":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
           },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
      },
      "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
          "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License consumption token.</p>",
              "smithy.api#required": {}
```

```
            }
          },
          "DryRun": {
            "target": "com.amazonaws.licensemanager#Boolean",
            "traits": {
              "smithy.api#default": false,

           "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
          "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License consumption token.</p>"
            }
          },
          "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the
license consumption expires.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#FailedDependencyException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          },
          "ErrorCode": {
            "target": "com.amazonaws.licensemanager#String"
          }
        },
        "traits": {
```

```
            "aws.protocols#awsQueryError": {
                "code": "FailedDependency",
                "httpResponseCode": 424
            },
            "smithy.api#documentation": "<p>A dependency required to run the API is missing.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 424
        }
    },
    "com.amazonaws.licensemanager#Filter":
{
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#FilterName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanager#FilterValues",
                "traits": {
                    "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only
specify one value for the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a\n        describe operation. Filters can be used to match a set of resources by specific criteria,\n        such as
tags, attributes, or IDs.</p>"

        }
    },
    "com.amazonaws.licensemanager#FilterLimitExceededException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FilterLimitExceeded",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
            "smithy.api#error": "client",
```

```
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Filter"
        }
    },
    "com.amazonaws.licensemanager#FilterName": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValue":
{
        "type": "string"
    },
    "com.amazonaws.licensemanager#FilterValues": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#FilterValue",
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#Filters": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Filter",
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#GetAccessToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
        },

  "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access tokens\n          are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
            "Token":
{
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse": {
        "type": "structure",
        "members": {
            "AccessToken": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
```

```
      "smithy.api#documentation": "<p>Temporary access token.</p>"
          }
        }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#GetGrant": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#GetGrantRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#GetGrantResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
       },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
    }
  },
  "com.amazonaws.licensemanager#GetGrantRequest": {
    "type": "structure",
    "members": {
      "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
        "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed
 information about the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
 configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
```

```
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
                }
            },
```

```
        "LicenseRules": {
          "target": "com.amazonaws.licensemanager#StringList",
          "traits": {
            "smithy.api#documentation": "<p>License rules.</p>"
          }
        },
        "LicenseCount": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of available licenses.</p>"
          }
        },
        "LicenseCountHardLimit": {

 "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
          }
        },
        "ConsumedLicenses": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License configuration status.</p>"
          }
        },
        "OwnerAccountId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Account ID of the owner
of the license configuration.</p>"
          }
        },
        "ConsumedLicenseSummaryList": {
          "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
          }
        },
        "ManagedResourceSummaryList": {
          "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
```

```
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
            }
          },
          "ProductInformationList":
{
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>Product information.</p>"
            }
          },
          "AutomatedDiscoveryInformation": {
            "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
            "traits": {
              "smithy.api#documentation": "<p>Automated discovery information.</p>"
            }
          },
          "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTask":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information
on.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
                }
            },
            "SourceLicenseContext": {
```

```
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type converted from.</p>"
            }
          },
          "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
             "traits": {
              "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
              "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
            }
          },
          "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task
 was started .</p>"
            }
          },
          "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
          },
          "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
```

```
  "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"

},
    "output": {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
       },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
    }
  },
  "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
    "type": "structure",
    "members": {
      "LicenseManagerReportGeneratorArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
          "smithy.api#required": {}
        }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse":
{
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Version": {
                "target":
 "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
            "License": {
```

```
                "target": "com.amazonaws.licensemanager#License",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output":
{
            "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified
license.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
```

```
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
        "type": "structure",
        "members": {
          "LicenseUsage": {
            "target": "com.amazonaws.licensemanager#LicenseUsage",
            "traits": {
              "smithy.api#documentation": "<p>License usage details.</p>"
            }
          }
        },
         "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
```

```
            "smithy.api#documentation":
 "<p>Gets the License Manager settings for the current Region.</p>"
          }
       },
       "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
          "type": "structure",
          "members": {},
          "traits": {
             "smithy.api#input": {}
          }
       },
       "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
          "type": "structure",
          "members": {
             "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                   "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n         and so on.</p>"
                }
             },
             "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                   "smithy.api#documentation": "<p>SNS topic configured
 to receive notifications from License Manager.</p>"
                }
             },
             "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                   "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n         cross-account discovery.</p>"
                }
             },
             "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                   "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
                }
             },
             "LicenseManagerResourceShareArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                   "smithy.api#documentation": "<p>Amazon
 Resource Name (ARN) of the resource share. The License Manager management account \n         provides member
accounts with access to this share.</p>"
                }
```

```
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#Grant": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
          }
        },
        "GrantName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant name.</p>",
            "smithy.api#required": {}

}
        },
        "ParentArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Parent ARN.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>License ARN.</p>",
            "smithy.api#required": {}
          }
        },
        "GranteePrincipalArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The grantee principal ARN.</p>",
            "smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Home Region of the grant.</p>",
              "smithy.api#required": {}
            }
          },
          "GrantStatus": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>",
              "smithy.api#required": {}
            }
          },
          "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
              "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Grant version.</p>",
              "smithy.api#required": {}
            }
          },
          "GrantedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
              "smithy.api#documentation": "<p>Granted operations.</p>",
              "smithy.api#required": {}
            }
          },
          "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
              "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes a grant.</p>"
        }
      },
      "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Grant"
```

```
    }
},
"com.amazonaws.licensemanager#GrantStatus": {
    "type": "enum",
    "members": {
        "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
        },
        "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
        },
        "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
        },
        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        },
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },
        "DISABLED": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISABLED"
            }
          },
          "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits":
{
              "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>"
            }
          },
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product name.</p>"

         }
          },
          "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product SKU.</p>"
            }
          },
          "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
              "smithy.api#documentation": "<p>Granted license issuer.</p>"
            }
          },
```

```
            "HomeRegion": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Home Region of the granted license.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanager#LicenseStatus",
              "traits": {
                "smithy.api#documentation":
 "<p>Granted license status.</p>"
              }
            },
            "Validity": {
              "target": "com.amazonaws.licensemanager#DatetimeRange",
              "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
 ISO8601-UTC format.</p>"
              }
            },
            "Beneficiary": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
              }
            },
            "Entitlements": {
              "target": "com.amazonaws.licensemanager#EntitlementList",
              "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
              }
            },
            "ConsumptionConfiguration": {

 "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
              "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
              }
            },
            "LicenseMetadata": {
              "target": "com.amazonaws.licensemanager#MetadataList",
              "traits": {
                "smithy.api#documentation": "<p>Granted license metadata.</p>"
              }
            },
            "CreateTime": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
```

```
                "smithy.api#documentation": "<p>Creation time of the granted license.</p>"
              }
            },
            "Version": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Version of the
granted license.</p>"
              }
            },
            "ReceivedMetadata": {
              "target": "com.amazonaws.licensemanager#ReceivedMetadata",
              "traits": {
                "smithy.api#documentation": "<p>Granted license received metadata.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
          }
        },
        "com.amazonaws.licensemanager#GrantedLicenseList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#GrantedLicense"
          }
        },
        "com.amazonaws.licensemanager#ISO8601DateTime": {
          "type": "string",
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[
0-3]|[0-1][0-9]):[0-5][0-9])+$"
          }
        },
        "com.amazonaws.licensemanager#Integer": {
          "type": "integer"
        },
        "com.amazonaws.licensemanager#InvalidParameterValueException": {
          "type": "structure",
          "members": {
            "Message": {
              "target": "com.amazonaws.licensemanager#Message"
            }
```

```
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "InvalidParameterValueProvided",
            "httpResponseCode": 400
          },
          "smithy.api#documentation": "<p>One or more parameter values are not valid.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },
      "com.amazonaws.licensemanager#InvalidResourceStateException":
{
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "InvalidResourceState",
            "httpResponseCode": 400
          },
          "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n          <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },
      "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",

     "traits": {
              "smithy.api#documentation": "<p>Name of the filter.</p>",
              "smithy.api#required": {}
            }
          },
          "Condition": {
            "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
            "traits": {
              "smithy.api#documentation": "<p>Condition of the filter.</p>",
              "smithy.api#required": {}
            }
```

```
        },
        "Value": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Value of the filter.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
      }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
      "type": "enum",
       "members": {
        "EQUALS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EQUALS"
          }
        },
        "NOT_EQUALS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "NOT_EQUALS"
          }
        },
        "BEGINS_WITH": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "BEGINS_WITH"
          }
        },
        "CONTAINS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "CONTAINS"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
      "type": "list",

  "member": {
        "target": "com.amazonaws.licensemanager#InventoryFilter"
      }
    },
```

```
    "com.amazonaws.licensemanager#Issuer": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Issuer name.</p>",
            "smithy.api#required": {}
          }
        },
        "SignKey": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about the issuer of a license.</p>"
      }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Issuer name.</p>"
          }
        },
        "SignKey": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing algorithm.</p>"
          }
        },
        "KeyFingerprint": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Issuer key fingerprint.</p>"
          }
        }
```

```
    },
    "traits": {
      "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
    }
  },
  "com.amazonaws.licensemanager#License": {
    "type": "structure",
    "members": {
      "LicenseArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
        }
      },
      "LicenseName": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>License name.</p>"
        }
      },
      "ProductName": {
        "target": "com.amazonaws.licensemanager#String",

"traits": {
          "smithy.api#documentation": "<p>Product name.</p>"
        }
      },
      "ProductSKU": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Product SKU.</p>"
        }
      },
      "Issuer": {
        "target": "com.amazonaws.licensemanager#IssuerDetails",
        "traits": {
          "smithy.api#documentation": "<p>License issuer.</p>"
        }
      },
      "HomeRegion": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Home Region of the license.</p>"
        }
      },
      "Status": {
        "target": "com.amazonaws.licensemanager#LicenseStatus",
```

```
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          },
          "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
              "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
            }
          },
          "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License beneficiary.</p>"
            }
          },
          "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
              "smithy.api#documentation": "<p>License entitlements.</p>"
            }
          },

        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
          },
          "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>License metadata.</p>"
            }
          },
          "CreateTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>License creation time.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>License version.</p>"
            }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {

             "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation":
"<p>License rules.</p>"
                }
            },
            "LicenseCount": {
```

```
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
          },
          "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
          },
          "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
          },
          "ConsumedLicenses":
{
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Status of the license configuration.</p>"
            }
          },
          "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"
            }
          },
          "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
            "traits": {

    "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
            }
          },
          "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
```

```
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>Product information.</p>"
            }
          },
          "AutomatedDiscoveryInformation": {
            "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
            "traits": {
              "smithy.api#documentation": "<p>Automated discovery information.</p>"

          }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n        must be associated with a host), and the number of licenses purchased and used.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"

      }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Type of server resource.</p>"
            }
          },
          "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource consuming licenses.</p>"
            }
          },
          "AssociationTime": {
```

```
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
            }
          },
          "AmiAssociationScope": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members": {
          "AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "AVAILABLE"
            }
          },

          "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISABLED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of resource.</p>"
            }
        },
        "ResourceStatus": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Status of the resource.</p>"
            }
        },
        "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
            }
        },
        "AssociationTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
             }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license
configuration.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
    }
},
"com.amazonaws.licensemanager#LicenseConfigurations": {
```

```
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#LicenseConfiguration"
      }
    },
    "com.amazonaws.licensemanager#LicenseConversionContext": {
      "type": "structure",
      "members": {
        "UsageOperation": {
          "target": "com.amazonaws.licensemanager#UsageOperation",
          "traits": {
            "smithy.api#documentation":
 "<p>The Usage operation value that corresponds to the license type you are converting your resource from.  For more information about which platforms correspond to which usage operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n        </p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
      }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
      "type": "structure",
      "members": {
        "LicenseConversionTaskId": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"

   }
        },
        "ResourceArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated with the license type\n        conversion task.</p>"
          }
        },
        "SourceLicenseContext": {
          "target": "com.amazonaws.licensemanager#LicenseConversionContext",
          "traits": {
            "smithy.api#documentation": "<p>Information about the license type this conversion task converted from.</p>"
          }
        },
        "DestinationLicenseContext": {
```

```
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license type this conversion task converted to.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the conversion task.</p>"
            }
          },
          "StatusMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
            }
          },
          "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>The time the conversion task was started at.</p>"
            }
          },
          "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>The time the usage operation value of the resource was changed.</p>"
            }
          },
          "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTaskId": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
```

```
            },
            "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskStatus":
{
        "type": "enum",
        "members": {
            "IN_PROGRESS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "IN_PROGRESS"
                }
            },
            "SUCCEEDED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "SUCCEEDED"
                }
            },
            "FAILED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType":
{
        "type": "enum",
        "members": {
            "VCPU": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "vCPU"
                }
            },
            "INSTANCE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Instance"
```

```
            }
          },
          "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Core"
            }
          },
          "SOCKET": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Socket"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseDeletionStatus":
{
        "type": "enum",
        "members": {
          "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_DELETE"
            }
          },
          "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#License"
        }
      },
      "com.amazonaws.licensemanager#LicenseOperationFailure": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
```

```
"<p>Amazon Resource Name (ARN) of the resource.</p>"
                }
            },
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#ResourceType",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type.</p>"
                }
            },
            "ErrorMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Error message.</p>"
                }
            },
            "FailureTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Failure time.</p>"
                }
            },
            "OperationName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Name of the operation.</p>"
                }
            },
            "ResourceOwnerId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
                }
            },
            "OperationRequestedBy": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
                }
            },
            "MetadataList": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                    "smithy.api#documentation": "<p>Reserved.</p>"
                }
            }
```

```
    },
        "traits": {
            "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseOperationFailureList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecification": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "AmiAssociationScope": {
                "target": "com.amazonaws.licensemanager#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseSpecifications": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseSpecification"
        }
    },
    "com.amazonaws.licensemanager#LicenseStatus": {
        "type": "enum",
        "members": {
            "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
```

```
            }
        },
        "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",

       "traits": {
                "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
        },
        "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
            }
        },
        "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
            }
        },

      "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DELETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#LicenseUsage": {
    "type": "structure",
    "members": {
        "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
            "traits": {
```

```
                "smithy.api#documentation": "<p>License entitlement usages.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"
          }
        },
        "com.amazonaws.licensemanager#LicenseUsageException": {
          "type": "structure",
          "members": {
            "Message": {
              "target": "com.amazonaws.licensemanager#Message"
             }
          },
          "traits": {
            "aws.protocols#awsQueryError": {
              "code": "LicenseUsageFailure",
              "httpResponseCode": 412
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
          }
        },
        "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the specified license
configuration.</p>\n        <p>Resource associations need not consume licenses from a license configuration. \n
For example, an AMI or a stopped instance might not consume a license (depending
 on \n        the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {

            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationAssociations": {
                "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the associations for the license
```

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configuration.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }

        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrants": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {

  "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
```

```
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
            "GrantArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                 "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n
  <li>\n            <p>\n              <code>GranteePrincipalARN</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>LicenseIssuerName</code>\n            </p>\n          </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
        "type": "structure",
        "members": {
            "Grants": {
                "target": "com.amazonaws.licensemanager#GrantList",
                "traits": {
                    "smithy.api#documentation": "<p>Distributed grant details.</p>"
                }
```

```
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
           "traits": {
             "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {

          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
      "type": "structure",
      "members": {
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
```

```
            "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
            "smithy.api#required": {}

    }
      },
      "MaxResults": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse": {
    "type": "structure",
    "members": {
      "LicenseOperationFailureList": {
        "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",

   "traits": {
            "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConfigurations": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
    },
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        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns":
{
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
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            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#Filters",
            "traits": {
              "smithy.api#documentation":
 "<p>Filters to scope the results. The following filters and logical operators\n are supported:</p>\n <ul>\n
    <li>\n <p>\n <code>licenseCountingType</code> - The dimension for which licenses are
counted.\n Possible values are <code>vCPU</code> | <code>Instance</code> | <code>Core</code> |
<code>Socket</code>.</p>\n </li>\n <li>\n <p>\n
<code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license enforcement is
used.</p>\n </li>\n <li>\n <p>\n <code>usagelimitExceeded</code> - A Boolean
value that indicates whether the available licenses have been exceeded.</p>\n </li>\n </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse":
 {
        "type": "structure",
        "members": {
          "LicenseConfigurations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurations",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest":
{
        "type": "structure",
        "members": {
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#Filters",
            "traits": {
              "smithy.api#documentation": "<p>\n        Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
            }

      }
        },
        "traits": {
```

```
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTasks": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n            <li>\n                <p>\n                    <code>LicenseConfigurationArn</code>\n
            </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
            "ReportGenerators": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorList",
```

```
            "traits": {
              "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license configurations.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
```

```
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input":
 {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {
          "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
              "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersions": {
```

```
        "type": "operation",
        "input": {
            "target":
"com.amazonaws.licensemanager#ListLicenseVersionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
        }

    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
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```
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
      "type": "structure",
      "members": {
        "Licenses": {
          "target": "com.amazonaws.licensemanager#LicenseList",
          "traits": {
            "smithy.api#documentation": "<p>License details.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenses": {
      "type": "operation",
      "input": {

"target": "com.amazonaws.licensemanager#ListLicensesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListLicensesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
```

```
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {

          "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListLicensesRequest": {
          "type": "structure",
          "members": {
            "LicenseArns": {
              "target": "com.amazonaws.licensemanager#ArnList",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n
        </p>\n          </li>\n          <li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n
 </li>\n          <li>\n            <p>\n              <code>Status</code>\n            </p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            }
          },
          "traits": {
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            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse":
{
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanager#ListReceivedGrantsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits":
{
            "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while
specifying the\n          recipient as this Amazon Web Services account, your organization, or an organizational unit\n
    (OU) to which this member account belongs.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {

        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
```

```
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>ParentArn</code>\n                </p>\n
    </li>\n            <li>\n                <p>\n                    <code>GranteePrincipalArn</code>\n                </p>\n
</li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
 "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
        "type": "structure",
        "members": {
            "Grants": {
                "target": "com.amazonaws.licensemanager#GrantList",
                "traits": {
                    "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
                }
```

```
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
      "type": "structure",
      "members": {
        "GrantArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n
          <p>\n            <code>ProductSKU</code>\n          </p>\n        </li>\n        <li>\n          <p>\n
           <code>LicenseIssuerName</code>\n          </p>\n        </li>\n        <li>\n          <p>\n
<code>LicenseArn</code>\n          </p>\n        </li>\n        <li>\n          <p>\n
<code>GrantStatus</code>\n          </p>\n        </li>\n        <li>\n          <p>\n
<code>GranterAccountId</code>\n          </p>\n        </li>\n      </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
              "smithy.api#documentation": "<p>Received grant details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },

    "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicenses": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
           },
          {
```

```
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists received licenses.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },

{
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {
```

```
      "type": "structure",
      "members": {
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n        <li>\n        <p>\n        <code>Beneficiary</code>\n        </p>\n
      </li>\n        <li>\n        <p>\n        <code>ProductSKU</code>\n        </p>\n        </li>\n
</ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
           "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
      "type": "structure",
      "members": {
        "Licenses": {
          "target": "com.amazonaws.licensemanager#GrantedLicenseList",
          "traits": {
            "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
       },
      "traits": {
        "smithy.api#output": {}
      }
    },
```

```
"com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
    "type": "structure",
    "members": {
        "LicenseArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>ProductSKU</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                    <code>Status</code>\n
    </p>\n            </li>\n            <li>\n                <p>\n                    <code>Fingerprint</code>\n                </p>\n
 </li>\n            <li>\n                <p>\n                    <code>IssuerName</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                    <code>Beneficiary</code>\n                </p>\n            </li>\n        </ul>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }

        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
    "type": "structure",
    "members": {
        "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
                "smithy.api#documentation": "<p>Received license details.</p>"
            }
        },
        "NextToken": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventory": {
        "type": "operation",
        "input":
{
          "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"

    },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
```

```
      "type": "structure",
      "members": {
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },

      "Filters": {
            "target": "com.amazonaws.licensemanager#InventoryFilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n are supported:</p>\n <ul>\n <li>\n <p>\n <code>account_id</code> - The ID of the Amazon Web Services account that owns the resource.\n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n <code>application_name</code> - The name of the application. \n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n </li>\n <li>\n <p>\n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>.</p>\n </li>\n <li>\n <p>\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n </li>\n <li>\n <p>\n <code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n <code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account).</p>\n </li>\n </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
        "type": "structure",
        "members": {
          "ResourceInventoryList": {
            "target": "com.amazonaws.licensemanager#ResourceInventoryList",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Information about the resources.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListTagsForResource":
{
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {

"smithy.api#documentation": "<p>Lists the tags for the specified resource. For more information about tagging support in\n        License Manager, see the <a href=\"https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html\">TagResource</a> operation.</p>"
    }
},
```

```
    "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
      "type": "structure",
      "members":
{
        "Tags": {
          "target": "com.amazonaws.licensemanager#TagList",
          "traits": {
            "smithy.api#documentation": "<p>Information about the tags.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListTokens": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListTokensRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListTokensResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
            "TokenIds": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token IDs.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters
 to scope the results. The following filter is supported:</p>\n        <ul>\n        <li>\n        <p>\n
<code>LicenseArns</code>\n        </p>\n        </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListTokensResponse": {
        "type":
```

```
"structure",
        "members": {
          "Tokens": {
            "target": "com.amazonaws.licensemanager#TokenList",
            "traits": {
              "smithy.api#documentation": "<p>Received token details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
```

```
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n            consumption
 details by resource at a selected point in time. Use this action to audit the\n            current license consumption for any license inventory and configuration.</p>"
          }
       },
       "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
          "type": "structure",
          "members": {
             "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                   "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                   "smithy.api#required": {}
                }
             },
             "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                   "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
             },

        "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                   "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
             },
             "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                   "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n            are supported:</p>\n            <ul>\n            <li>\n            <p>\n <code>resourceArn</code> - The ARN of the license configuration resource.</p>\n            </li>\n            <li>\n      <p>\n            <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | \n \t<code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>).</p>\n            </li>\n            <li>\n            <p>\n            <code>resourceAccount</code> - The ID of the account that owns the resource.</p>\n    </li>\n        </ul>"
                }
             }
          },
          "traits": {
             "smithy.api#input": {}
          }
       },
```

```
"com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
   "type": "structure",
   "members": {
      "LicenseConfigurationUsageList": {
         "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
         "traits": {
            "smithy.api#documentation": "<p>Information about the license configurations.</p>"
         }
      },
      "NextToken": {
         "target": "com.amazonaws.licensemanager#String",
         "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"

     }
      }
   },
   "traits": {
      "smithy.api#output": {}
   }
},
"com.amazonaws.licensemanager#Location": {
   "type": "string"
},
"com.amazonaws.licensemanager#Long": {
   "type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
   "type": "structure",
   "members": {
      "ResourceType": {
         "target": "com.amazonaws.licensemanager#ResourceType",
         "traits": {
            "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
         }
      },
      "AssociationCount": {
         "target": "com.amazonaws.licensemanager#BoxLong",
         "traits": {
            "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
         }

  }
   },
   "traits": {
      "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
   }
},
```

```
    "com.amazonaws.licensemanager#ManagedResourceSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
      }
    },
    "com.amazonaws.licensemanager#MaxSize100": {
      "type": "integer",
      "traits": {
        "smithy.api#range": {
          "min": 1,
          "max": 100
        }
      }
    },
    "com.amazonaws.licensemanager#MaxSize3StringList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 3
        }
      }

  },
    "com.amazonaws.licensemanager#Message": {
      "type": "string"
    },
    "com.amazonaws.licensemanager#Metadata": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>The key name.</p>"
          }
        },
        "Value": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>The value.</p>"
          }
        }
      },
      "traits": {
```

```
            "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
          }
        },
        "com.amazonaws.licensemanager#MetadataList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#Metadata"
          }
        },
        "com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
          "type": "structure",
          "members": {
            "Message": {
              "target": "com.amazonaws.licensemanager#Message"
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement maximum count is reached.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
          }
        },
        "com.amazonaws.licensemanager#Options": {
          "type": "structure",
          "members": {
            "ActivationOverrideBehavior": {
              "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
              "traits": {
                "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of activating a grant.\n
          Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n
          <code>Status</code> parameter.</p>\n
          <ul>\n
          <li>\n
          <p>As a license administrator, you can optionally specify an\n
          <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n
          </li>\n
          <li>\n
          <p>As a grantor, you can optionally specify an\n
          <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n
          account in your organization.</p>\n
          </li>\n
          <li>\n
          <p>As a grantee, if the grantor creating the distributed grant doesnt specify an\n
          <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n
          are activating the grant.</p>\n
          </li>\n
          </ul>\n
          <dl>\n
          <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n
          <dd>\n
          <p>Use this value to activate a grant without replacing any member accounts\n
          active grants for the same product.</p>\n
          </dd>\n
          <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n
          <dd>\n
          <p>Use this value to activate a grant and disable other active grants in any\n
          member accounts for the same product. This action will also replace their\n
          previously activated grants with this activated grant.</p>\n
          </dd>\n
          </dl>"
              }
            }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#OrganizationConfiguration": {
        "type": "structure",
        "members": {
            "EnableIntegration": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Enables Organizations integration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
    },
    "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {

   "smithy.api#length": {
                "min": 1,
                "max": 1
            }
        }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
            "ResourceType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Resource type. The possible values are <code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
                    "smithy.api#required": {}
                }
            },
```

```
        "ProductInformationFilterList": {
          "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
          "traits": {
            "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code>
 which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies
the value to filter on. </p>\n        <p>Accepted values for <code>ProductInformationFilterName</code> are listed
here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. </p>\n
<p>The following filters and are supported when the resource type \n        is
<code>SSM_MANAGED</code>:</p>\n        <ul>\n        <li>\n        <p>\n        <code>Application
Name</code> - The name of the application.\n        Logical operator is <code>EQUALS</code>.</p>\n
</li>\n        <li>\n        <p>\n        <code>Application Publisher</code> - The publisher of the
application.\n        Logical operator is <code>EQUALS</code>.</p>\n        </li>\n        <li>\n
<p>\n        <code>Application Version</code> - The version of the
 application.\n        Logical operator is <code>EQUALS</code>.</p>\n        </li>\n        <li>\n
<p>\n        <code>Platform Name</code> - The name of the platform.\n        Logical operator is
<code>EQUALS</code>.</p>\n        </li>\n        <li>\n        <p>\n        <code>Platform
Type</code> - The platform type.\n        Logical operator is <code>EQUALS</code>.</p>\n        </li>\n
  <li>\n        <p>\n        <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services
resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>.  The
key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-
key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n
    </p>\n        </li>\n        <li>\n        <p>\n
        <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude
from automated discovery.\n        Logical operator is <code>NOT_EQUALS</code>.</p>\n        </li>\n
  <li>\n        <p>\n        <code>License Included</code> - The type of license included.\n        Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n        Possible values are:
<code>sql-server-enterprise</code> | \n        <code>sql-server-standard</code> | \n        <code>sql-server-
web</code> |  \n        <code>windows-server-datacenter</code>.</p>\n        </li>\n      </ul>\n
<p>The following filters and logical operators are supported when the resource type\n        is
<code>RDS</code>:</p>\n        <ul>\n        <li>\n        <p>\n        <code>Engine Edition</code> -
The edition of the database engine.\n        Logical operator is <code>EQUALS</code>.\n
        Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> |
<code>oracle-se2</code> \n        \t| <code>db2-se</code> | <code>db2-ae</code>.</p>\n        </li>\n
<li>\n        <p>\n        <code>License Pack</code> - The license pack.\n        Logical operator is
<code>EQUALS</code>.\n        Possible values are: <code>data guard</code> | \n        <code>diagnostic
pack sqlt</code> | \n        <code>tuning pack sqlt</code> | \n        <code>ols</code> | \n
<code>olap</code>.</p>\n        </li>\n      </ul>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
      }
    },
    "com.amazonaws.licensemanager#ProductInformationFilter":
```

```
{
    "type": "structure",
    "members": {
      "ProductInformationFilterName": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Filter name.</p>",
          "smithy.api#required": {}
        }
      },
      "ProductInformationFilterValue": {
        "target": "com.amazonaws.licensemanager#StringList",
        "traits": {
          "smithy.api#documentation": "<p>Filter value.</p>"
        }
      },
      "ProductInformationFilterComparator": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Logical operator.</p>",
          "smithy.api#required": {}
        }
      }
    },
     "traits": {
      "smithy.api#documentation": "<p>Describes product information filters.</p>"
    }
  },
  "com.amazonaws.licensemanager#ProductInformationFilterList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ProductInformationFilter"
    }
  },
  "com.amazonaws.licensemanager#ProductInformationList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ProductInformation"
    }
  },
  "com.amazonaws.licensemanager#ProvisionalConfiguration": {
    "type": "structure",
    "members": {
      "MaxTimeToLiveInMinutes": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",
```

```
        "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#RateLimitExceededException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "RateLimitExceeded",
                "httpResponseCode": 429
            },
            "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 429
        }
    },
    "com.amazonaws.licensemanager#ReceivedMetadata": {
        "type": "structure",
        "members": {
            "ReceivedStatus": {
                "target": "com.amazonaws.licensemanager#ReceivedStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Received status.</p>"
                }
            },
            "ReceivedStatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                    "smithy.api#documentation": "<p>Received status reason.</p>"
                }
            },
            "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Allowed operations.</p>"
                }
            }
        },
```

```
      "traits": {
        "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
      }
    },
    "com.amazonaws.licensemanager#ReceivedStatus": {
      "type": "enum",
      "members": {
        "PENDING_WORKFLOW": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "PENDING_WORKFLOW"
          }
        },
        "PENDING_ACCEPT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "PENDING_ACCEPT"
          }
        },
        "REJECTED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "REJECTED"
          }
        },
        "ACTIVE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "ACTIVE"
          }

},
        "FAILED_WORKFLOW": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "FAILED_WORKFLOW"
          }
        },
        "DELETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DELETED"
          }
        },
        "DISABLED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DISABLED"
```

```
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",

    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#RejectGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
```

```
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest":
{
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",

              "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
```

```
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#RenewType": {
      "type": "enum",
      "members": {
        "NONE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "None"
          }
        },
        "WEEKLY": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Weekly"
          }

    },
        "MONTHLY": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Monthly"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#ReportContext": {
      "type": "structure",
      "members": {
        "licenseConfigurationArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that
this generator reports on.</p>",
            "smithy.api#required": {}
          }
        }
      },
```

```
        "traits": {
            "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportFrequency": {

 "type": "structure",
        "members": {
            "value": {
                "target": "com.amazonaws.licensemanager#Integer",
                "traits": {
                    "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated.  \n         The only supported value is <code>1</code>.</p>"
                }
            },
            "period": {
                "target": "com.amazonaws.licensemanager#ReportFrequencyType",
                "traits": {
                    "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
or monthly.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
        }
    },
    "com.amazonaws.licensemanager#ReportFrequencyType": {
        "type": "enum",
        "members":
 {
            "DAY": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DAY"
                }
            },
            "WEEK": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "WEEK"
                }
            },
            "MONTH": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "MONTH"
                }
```

```
        }
      }
    },
    "com.amazonaws.licensemanager#ReportGenerator": {
      "type": "structure",
      "members": {
        "ReportGeneratorName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the report generator.</p>"

       }
        },
        "ReportType": {
          "target": "com.amazonaws.licensemanager#ReportTypeList",
          "traits": {
            "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
          }
        },
        "ReportContext": {
          "target": "com.amazonaws.licensemanager#ReportContext",
          "traits": {
            "smithy.api#documentation": "<p>License configuration type for this generator.</p>"
          }
        },
        "ReportFrequency": {
          "target": "com.amazonaws.licensemanager#ReportFrequency",
          "traits": {
            "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
          }
        },
        "LicenseManagerReportGeneratorArn": {
          "target": "com.amazonaws.licensemanager#String",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
          }
        },
        "LastRunStatus": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
          }
        },
        "LastRunFailureReason": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
          }
```

```
            },
            "LastReportGenerationTime": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Time
 the last report was generated at.</p>"
               }
            },
            "ReportCreatorAccount": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
               }
            },
            "Description": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Description of the report generator.</p>"
               }
            },
            "S3Location": {
               "target": "com.amazonaws.licensemanager#S3Location",
               "traits": {
                  "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
               }
            },

      "CreateTime": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Time the report was created.</p>"
               }
            },
            "Tags": {
               "target": "com.amazonaws.licensemanager#TagList",
               "traits": {
                  "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
         }
      },
      "com.amazonaws.licensemanager#ReportGeneratorList": {
         "type": "list",
```

```
        "member": {
          "target": "com.amazonaws.licensemanager#ReportGenerator"
        }
      },
      "com.amazonaws.licensemanager#ReportGeneratorName": {
        "type": "string",

   "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          }
        }
      },
      "com.amazonaws.licensemanager#ReportType": {
        "type": "enum",
        "members": {
          "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
            }
          },
          "LICENSE_CONFIGURATION_USAGE_REPORT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "LicenseConfigurationUsageReport"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ReportTypeList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#ReportType"

  }
      },
      "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
          "ResourceId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the resource.</p>"
            }
          },
          "ResourceType": {
```

```
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of resource.</p>"
            }
        },
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "Platform": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Platform of the resource.</p>"
            }
        },
        "PlatformVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
            }
        },
        "ResourceOwningAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a resource.</p>"
    }
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#ResourceInventory"
    }
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
```

```
        "aws.protocols#awsQueryError": {
          "code": "ResourceLimitExceeded",
          "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#ResourceNotFoundException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
         }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "InvalidResource.NotFound",
          "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#ResourceType": {
      "type": "enum",
      "members": {
        "EC2_INSTANCE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EC2_INSTANCE"
          }
        },
        "EC2_HOST": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EC2_HOST"
          }
        },
        "EC2_AMI": {
           "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EC2_AMI"
          }
        },
        "RDS": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "RDS"
            }
          },
          "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#S3Location": {
        "type": "structure",
        "members": {
          "bucket": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the S3 bucket reports are published
 to.</p>"
            }
          },
          "keyPrefix": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
 to.</p>"
        }
      },
      "com.amazonaws.licensemanager#ServerInternalException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "InternalError",
            "httpResponseCode": 500
          },
          "smithy.api#documentation":
```

```
"<p>The server experienced an internal error. Try again.</p>",
            "smithy.api#error": "server",
            "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 4096
            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }

},
    "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
            "Key": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The tag key.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The tag value.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the tags for a resource. For more information about tagging support in\n          License Manager, see the <a href=\"https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html\">TagResource</a> operation.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagKeyList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Tag"
        }
    },
    "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified resource. The following resources support\n          tagging in License Manager:</p>\n          <ul>\n          <li>\n          <p>Licenses</p>\n
```

```
</li>\n <li>\n <p>Grants</p>\n </li>\n <li>\n <p>License configurations</p>\n </li>\n <li>\n <p>Report generators</p>\n </li>\n </ul>"
        }
      },
      "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource. The following examples provide an example\n ARN for each supported resource in License Manager:</p>\n <ul>\n <li>\n <p>Licenses -\n <code>arn:aws:license-manager::111122223333:license:l-EXAMPLE2da7646d6861033667f20e895</code>\n </p>\n </li>\n <li>\n <p>Grants -\n <code>arn:aws:license-manager::111122223333:grant:g-EXAMPLE7b19f4a0ab73679b0beb52707</code>\n </p>\n </li>\n <li>\n <p>License configurations -\n <code>arn:aws:license-manager:us-east-1:111122223333:license-configuration:lic-EXAMPLE6a788d4c8acd4264ff0ecf2ed2d</code>\n </p>\n </li>\n <li>\n

 <p>Report generators -\n <code>arn:aws:license-manager:us-east-1:111122223333:report-generator:r-EXAMPLE825b4a4f8fe5a3e0c88824e5fc6</code>\n </p>\n </li>\n </ul>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>One or more tags.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
         "members": {
          "TokenId": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token ID.</p>"
            }
          },
          "TokenType": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
            }
          },
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "ExpirationTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits":
 {
              "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC format.</p>"
            }
          },
          "TokenProperties": {
            "target": "com.amazonaws.licensemanager#MaxSize3StringList",
            "traits": {
              "smithy.api#documentation": "<p>Data specified by the caller.</p>"
            }
          },
          "RoleArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
             }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes a token.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanager#TokenList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#TokenData"
        }
      },
      "com.amazonaws.licensemanager#TokenString": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 4096
          },
          "smithy.api#pattern": "^\\S+$"
        }
      },
      "com.amazonaws.licensemanager#TokenType": {
        "type": "enum",
        "members": {
          "REFRESH_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "REFRESH_TOKEN"
            }

          }
        }
      },
      "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },
      "com.amazonaws.licensemanager#UntagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#UntagResourceRequest"
```

```
        },
        "output": {
          "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
           },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Removes the specified tags from the specified resource.</p>"
        }
      },
      "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Amazon Resource Name (ARN) of the resource.</p>",
              "smithy.api#required": {}
            }
          },
          "TagKeys": {
            "target": "com.amazonaws.licensemanager#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
```

```
"com.amazonaws.licensemanager#UntagResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseConfigurationStatus": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
            "traits": {
                "smithy.api#documentation": "<p>New status of the license configuration.</p>"

    }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a
license\n        configuration is licenseAffinityToHost.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
            }
        },

        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New name of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New description of the license configuration.</p>"
            }
        },
        "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
```

```
            "smithy.api#documentation": "<p>New product information.</p>"
          }
        },
        "DisassociateWhenNotFound": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {

     "smithy.api#documentation": "<p>When true, disassociates a resource when software is uninstalled.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"

        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
```

```
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates a report generator.</p>\n
      <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
      },
      "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
          "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
              "smithy.api#required": {}
            }
          },
          "ReportGeneratorName": {
            "target": "com.amazonaws.licensemanager#ReportGeneratorName",
            "traits": {
              "smithy.api#documentation": "<p>Name of the report generator.</p>",
              "smithy.api#required": {}
            }

      },
          "Type": {
            "target": "com.amazonaws.licensemanager#ReportTypeList",
            "traits": {
              "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n <ul>\n <li>\n <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n </li>\n <li>\n <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n </li>\n </ul>",
              "smithy.api#required": {}
            }
          },
          "ReportContext": {
            "target": "com.amazonaws.licensemanager#ReportContext",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The report context.</p>",
                "smithy.api#required":
{}
            }
          },
          "ReportFrequency": {
            "target": "com.amazonaws.licensemanager#ReportFrequency",
            "traits": {
              "smithy.api#documentation": "<p>Frequency by which reports are generated.</p>",
              "smithy.api#required": {}
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientRequestToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the report
generator.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
        },
        "errors": [
```

```
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
              "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified Amazon Web Services resource.</p>\n          <p>You can update the license specifications of AMIs, instances, and hosts.\n          You cannot update the license specifications for launch templates and CloudFormation templates, \n          as they send license configurations to the operation that creates the resource.</p>"
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services resource.</p>",
                "smithy.api#required": {}
              }
            },
            "AddLicenseSpecifications": {
              "target": "com.amazonaws.licensemanager#LicenseSpecifications",
              "traits": {
                "smithy.api#documentation":
```

```
"<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to remove.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
        },
        "output":
{
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
```

```
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {

  "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where
the License Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used
for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account
discovery.</p>"
                 }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UsageOperation": {
        "type": "string",
```

```
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          }
        }
      },
      "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
         "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      }
    }
}
```


CheckInLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme

GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckoutBorrowLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing

```
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string
```

```
 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
 return err
 }
 if err = addRetry(stack, options); err != nil {
 return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
 return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
 err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
```

```
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)
```

```
// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement

 // Home Region for the license.
 //
 // This member is required.
```

```
 HomeRegion *string

 // License issuer.
 //
 // This member is required.
 Issuer *types.Issuer

 // License name.
 //
 // This member is required.
 LicenseName *string

 // Product name.
 //
 // This member is required.
 ProductName *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // Date and time range during which the license is valid, in ISO8601-UTC format.
 //
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 // Tags to add to the license. For more information about tagging support in
 // License Manager, see the [TagResource]operation.
 //
 // [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
 Tags []types.Tag

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus
```

```
 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
```

```
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err
= addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
}
if err = addRecursionDetection(stack); err != nil {
 return err
}
if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
}
if err = addResponseErrorMiddleware(stack); err != nil {
 return
err
}
if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
```

AWS SDK for Go

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AssociateLicense

- Initialize stack step
  - spanInitializeStart
  - RegisterServiceMetadata
  - legacyEndpointContextSetter
  - SetLogger
  - OperationInputValidation
  - spanInitializeEnd
- Serialize stack step
  - spanBuildRequestStart
  - setOperationInput
  - ResolveEndpoint
  - OperationSerializer
- Build stack step
  - ClientRequestID
  - ComputeContentLength
  - SetCredentialSourceMiddleware
  - UserAgent

```
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 Retry
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
```

```
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata
```

```
// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
```

```
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
```

```
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
```

```
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
             "traits": {
               "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
               "smithy.api#required": {}
             }
           }
         },
         "traits": {
           "smithy.api#input": {}
         }
       },
       "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
         "type": "structure",
         "members": {},
         "traits": {
           "smithy.api#output": {}
         }
       },
       "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
         "type": "structure",
         "members": {
           "Name": {
             "target": "smithy.api#String",
             "traits": {
               "smithy.api#documentation": "<p>The type of name to filter by.</p>"
              }
           },
           "Values": {
             "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
               "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
             }
           },
           "Operator": {
             "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
             "traits": {
               "smithy.api#documentation": "<p>An operator for filtering results.</p>"
             }
           }
         },
         "traits": {
           "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
         }
       },
       "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
         "type":
```

```
"list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetRegisteredSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation":
"<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
              "smithy.api#required": {}
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

         "traits": {
              "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
             }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/GetServiceSettings"

          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
```

```
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
                }
            },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                 "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
            "AmiId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
                }
            },
            "InstanceID": {
                "target": "smithy.api#String",
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```
            "traits": {
                "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
        },
        "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
                "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
        },
        "AccountID": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
        },
        "Region": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
        },
        "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
                "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
        },
        "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
```

```
                "target": "smithy.api#String",
                 "traits": {
                    "smithy.api#documentation": "<p>The time in which the last discovery updated the instance
details.</p>"
                }
            },
            "SubscriptionName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
                }
            },
            "OsVersion": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The operating system software version that runs on your
instance.</p>"
                }
            },
            "SubscriptionProviderCreateTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
                }
            },
            "SubscriptionProviderUpdateTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
                }
            },
            "DualSubscription": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
                }
            },
            "RegisteredWithSubscriptionProvider": {
                "target": "smithy.api#String",
                "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
             },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
            },
            {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
          }
        ],
        "traits": {
          "aws.api#service": {
            "sdkId": "License Manager Linux Subscriptions",
             "arnNamespace": "license-manager-linux-subscriptions",
            "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
          },
          "aws.auth#sigv4": {
            "name": "license-manager-linux-subscriptions"
          },
          "aws.protocols#restJson1": {},
          "smithy.api#cors": {
            "additionalAllowedHeaders": [
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              "content-type",
              "x-amz-content-sha256",
              "x-amz-user-agent",
              "x-amzn-platform-id",
              "x-amzn-trace-id"
            ],
            "additionalExposedHeaders": [
              "x-amzn-errortype",
              "x-amzn-requestid",
              "x-amzn-trace-id"
            ]
          },
          "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
          "smithy.api#title": "AWS License Manager Linux Subscriptions",
          "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
              "Region": {
                "builtIn": "AWS::Region",
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            "required": false,
            "documentation": "The AWS region used to dispatch the request.",
            "type": "String"
          },
          "UseDualStack": {
            "builtIn": "AWS::UseDualStack",
            "required": true,
            "default": false,
            "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
             "type": "Boolean"
          },
          "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
        },
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                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
```

```
                        true
                    ]
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        ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
            },
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                "conditions": [],
                "rules": [
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                        "conditions": [
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                                "fn": "booleanEquals",
                                "argv": [
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                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]

}
                        ],
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                        "type": "error"
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                        "conditions": [],
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                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
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                "type": "tree"

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            ],
            "type": "tree"
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            "conditions": [],
            "rules": [
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        ]
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    ],
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        "conditions": [
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"fn": "aws.partition",
            "argv": [
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              }
            ],
            "assign": "PartitionResult"
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        "rules": [
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            "conditions": [
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                "fn": "booleanEquals",
                "argv": [
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                "ref": "UseFIPS"
                  },
                  true
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              },
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
```

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],
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                                                "argv": [
                                                  {
                                                    "ref": "PartitionResult"

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                                                    "supportsFIPS"
                                                  ]
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                                              ]
                                            },
                                            {
                                              "fn": "booleanEquals",
                                              "argv": [
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                                                {
                                                  "fn": "getAttr",
                                                  "argv": [

                                                   {
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                                                    "supportsDualStack"
                                                  ]
                                                }
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                                            }
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                                          "rules": [
                                            {
                                              "conditions": [],

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                                                  "conditions": [],
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                    "properties": {},
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one or both",
        "type": "error"
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"conditions": [
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          },
          true
        ]
      }
    ],
    "rules": [
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        "conditions": [
          {

"fn": "booleanEquals",
            "argv": [
              {
                "fn": "getAttr",
                "argv": [
                  {
                    "ref": "PartitionResult"
                  },
                  "supportsFIPS"
                ]
```

```
                    },
                    true

                ]
            }
        ],
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                "conditions": [],
                "rules": [
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                        "conditions": [],
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fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
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but this partition does not support FIPS",
        "type": "error"
    }
  ],
  "type": "tree"
},
{
  "conditions": [
    {
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      "argv": [
        {
          "ref": "UseDualStack"
        },
        true

    ]
    }
```

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                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {

                                            "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]
                                    }
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [],
                                "rules": [

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                                        "conditions": [],
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
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                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
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                                "type": "tree"

                    }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
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                        "type": "error"
                    }
```

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                                ],
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                                "conditions": [],
                                "rules": [
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
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                                            "headers": {}
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                                        "type": "endpoint"
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                                ],
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                        ],
                        "type": "tree"
                    }
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                "type": "tree"
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                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
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        "type": "tree"
    }
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"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

}
            },
            "params": {
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                "UseFIPS": true,
```

```
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {

      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
            }

    },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
```

```
                "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
              }
             },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": false,
              "UseDualStack": false
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        }
      },
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  "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "endpoint": {
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          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
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        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
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          }

       },
        "params": {
          "Region": "us-gov-east-1",
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          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
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        },
        "params": {
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          "UseDualStack": true
        }
      },
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
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              }
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            "params": {
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              "UseDualStack": false
            }
          },
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            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {

        "Region": "us-iso-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
              }
            },
            "params": {
              "Region": "us-iso-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
            "expect": {
              "error": "DualStack is enabled but this partition does not support DualStack"
            },
            "params": {
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              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
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        }
      },
      "params": {
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        "UseFIPS":
false,
        "UseDualStack": false
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    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
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      "params": {
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        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
         }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
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      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }

  },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
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disabled",
      "expect": {
        "endpoint": {
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        }
      },
      "params": {
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        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {

      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
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                  "UseDualStack": false,
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                }
              },
              {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {

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                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "Missing region",
                "expect": {
                  "error": "Invalid Configuration: Missing Region"
                }
              }
            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled LinuxSubscriptionsDiscovery"

       },
            {
              "name": "Disabled",
              "value": "Disabled",
              "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
          ]
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
      "type": "structure",
      "members": {
        "SourceRegions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
            "smithy.api#required": {}
          }
        },
        "OrganizationIntegration": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
          "traits": {
            "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },

  {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
```

```
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "Instances"
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
{
         "type": "structure",
         "members": {
            "Filters": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n         <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n         <ul>\n            <li>\n
   <p>\n                  <code>AccountID</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
      <code>AmiID</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>DualSubscription</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>InstanceID</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>InstanceType</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>ProductCode</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>Region</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>Status</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>UsageOperation</code>\n               </p>\n            </li>\n         </ul>\n         <p>For each filter, you can use
one of the following <code>Operator</code>
 values to \n  \t\tdefine the behavior of the filter:</p>\n         <ul>\n            <li>\n               <p>\n
<code>contains</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>equals</code>\n               </p>\n            </li>\n            <li>\n               <p>\n
<code>Notequal</code>\n               </p>\n            </li>\n         </ul>"
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
               }
            },
```

```
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to
 start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
                  "smithy.api#length": {
                     "min": 1,
                     "max": 16384
                  }
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
         "type": "structure",
         "members": {
            "Instances": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
               "traits": {
                  "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
               }
            },
            "NextToken": {

          "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
               }
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

```
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",

    "items": "Subscriptions"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
          "type": "structure",
          "members": {
            "Filters": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n       <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n          <p>The valid names for this filter are:</p>\n          <ul>\n <li>\n              <p>\n                <code>Subscription</code>\n              </p>\n            </li>\n          </ul>\n <p>The
       valid Operators for this filter are:</p>\n          <ul>\n            <li>\n              <p>\n <code>contains</code>\n              </p>\n            </li>\n            <li>\n              <p>\n <code>equals</code>\n              </p>\n            </li>\n            <li>\n              <p>\n <code>Notequal</code>\n              </p>\n            </li>\n          </ul>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
              "traits": {
```

```
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                "smithy.api#length": {
                  "min": 1,
                  "max": 16384
                }
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
          "type": "structure",
          "members": {
            "Subscriptions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
              "traits": {
                "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
               "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
          "type": "operation",
          "input": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
          },
          "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration
resources for your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListRegisteredSubscriptionProviders"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "RegisteredSubscriptionProviders"
          }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSources": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
            "traits": {
              "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
```

```
                }
            }

  },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
      "type": "structure",
      "members": {
        "RegisteredSubscriptionProviders": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
          "traits": {
            "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
          }
        },

        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
      },
```

```
      "errors": [
        {

    "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
        "smithy.api#http": {
          "method": "GET",
          "uri": "/tags/{resourceArn}"
        },
        "smithy.api#readonly": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
      "type": "structure",
      "members": {
        "resourceArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
           "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
      "type": "structure",
      "members": {
        "tags": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
          }
        }
```

```
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "EQUAL",
                    "value": "Equal",
                    "documentation": "Equal operator"
                },
                {
                    "name": "NOT_EQUAL",
                    "value": "NotEqual",
                    "documentation": "Not equal operator"
                },
                {
                    "name": "CONTAINS",
                    "value": "Contains",
                    "documentation": "Contains operator"
                }
            ],
            "smithy.api#length": {
                "min": 1,
                "max": 20
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "Enabled",
                    "value": "Enabled",
                    "documentation": "Enabled OrganizationIntegration"
                },
                {
                    "name": "Disabled",
                    "value": "Disabled",
                    "documentation": "Disabled OrganizationIntegration"
                }
            ]
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
       },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/RegisterSubscriptionProvider"

        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
            "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
            "smithy.api#required": {}
          }
        },
```

```
            "SecretArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the
 Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                "smithy.api#required": {}
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
          "type": "structure",
          "members": {
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
              "traits": {
                "smithy.api#documentation":
 "<p>The Linux subscription provider that you registered.</p>"
              }
            },
            "SubscriptionProviderArn": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
              }
            },
            "SubscriptionProviderStatus": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
              "traits": {
                "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
             "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed
```

```
third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and
license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider,
License Manager can get subscription data from the registered provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

  }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
```

```
                "value": "Completed",
                "documentation": "Completed status"
            },
            {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
            },
            {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
            }
        ]
    }
},

"com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
    "type": "list",
    "member": {
        "target": "smithy.api#String",
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            }
        }
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max": 100
        },
        "smithy.api#uniqueItems": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
    "type": "map",
    "key": {
        "target": "smithy.api#String"
    },
    "value": {
        "target": "smithy.api#String"
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
    "type": "structure",
    "members": {
```

```
            "Name":
{
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [

 {
                    "name": "RedHat",
```

```
                "value": "RedHat",
                "documentation": "RedHat subscription provider namespace"
            }
          ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "ACTIVE",
                    "value": "ACTIVE",
                    "documentation": "ACTIVE status"
                },
                {
                    "name": "INVALID",
                    "value": "INVALID",

"documentation": "INVALID status"
                },
                {
                    "name": "PENDING",
                    "value": "PENDING",
                    "documentation": "PENDING status"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
        "type": "list",
        "member": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
        "smithy.api#http": {
          "method": "PUT",
          "uri": "/tags/{resourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
      "type": "structure",
      "members":
{
        "resourceArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "tags": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
          "traits": {
            "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
            "smithy.api#required": {}
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }

      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation":
"<p>The request was denied due to request throttling.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
             "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tagKeys": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
                "traits": {

              "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
```

```
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
   "type": "structure",
   "members": {},
   "traits": {
      "smithy.api#output": {}
   }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
   "type": "operation",
   "input": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
   },
   "output": {
      "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

 },
   "errors": [
      {
         "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
      },
      {
         "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
      },
      {
         "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
      }
   ],
   "traits": {
      "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
      "smithy.api#http": {
         "code": 200,
         "method": "POST",
         "uri": "/subscription/UpdateServiceSettings"
      },
      "smithy.api#idempotent": {}
   }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
   "type": "structure",
   "members": {
       "LinuxSubscriptionsDiscovery": {
         "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
         "traits": {
            "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
            "smithy.api#required": {}
         }
      },
```

```
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowUpdate": {
                "target": "smithy.api#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux subscriptions. If you\n      allow updates, you can aggregate Linux subscription data in more than one home Region.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
```

```
current status.</p>"
                }

        },
            "HomeRegions": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
```

```
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription
```

```
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
```

```
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }
```

```
 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
```

```
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
```

```
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
```

```
c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
```

```
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
```

RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
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{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": " You don't have sufficient access to perform this action. ",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": " The directory ID for an Active Directory identity provider. "
          }
        },
        "ActiveDirectorySettings":

```
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
            "traits": {
                "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP \n\t\t\taddresses, and the credential provider for user administration.</p>"
            }
        },
        "ActiveDirectoryType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
            "traits": {
                "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about an Active Directory identity provider.</p>"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
    "type": "structure",
    "members": {
      "DomainName": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
        }
      },
      "DomainIpv4List": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
        "traits": {
          "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active Directory.</p>",
          "smithy.api#length": {
            "min": 1,
            "max": 2
          }
        }
      },
      "DomainCredentialsProvider": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
        "traits": {
          "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration.</p>"
        }
```

```
            },
            "DomainNetworkSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
         "type": "string",
         "traits": {
            "smithy.api#enum": [
               {
                  "name": "SELF_MANAGED",
                  "value": "SELF_MANAGED",
                  "documentation": "SELF_MANAGED type of Active Directory"
               },
               {
                  "name": "AWS_MANAGED",
                  "value": "AWS_MANAGED",
                  "documentation": "AWS_MANAGED type of Active Directory"
               }
            ]
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Arn": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
         },
```

```
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n         <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http":
{
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
```

```
            },
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based
subscription.</p>",
                  "smithy.api#required": {}
               }
            },
             "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                  "smithy.api#required": {}
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to associate.</p>"
               }
            },
            "Tags": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
               "traits": {
                  "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
               }
            }
         },
         "traits": {

      "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
         "type": "structure",
         "members": {
            "InstanceUserSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
      },
      "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
           }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
          "smithy.api#error": "server"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },

        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
```

```
{
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider specified in the request.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code> resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
          "SecretsManagerCredentialsProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user \n\t\t\tadministration.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
        },
        "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
```

```
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
          "type": "structure",
          "members": {
            "LicenseServerEndpoint": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
              "traits": {
                "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
```

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                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
```

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    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
      "type": "structure",
      "members": {
        "IdentityProviderSummary": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
          "traits": {
            "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#output": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity provider.</p>"
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate from the EC2 instance.</p>"
```

```
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to disassociate.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummary":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory domain.</p>",
              "smithy.api#length": {
                "min": 1
              },

    "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Attribute": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
            }
          },
          "Operation": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
            }
          },
          "Value": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
          "ActiveDirectoryIdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
             "traits": {
              "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
            }
          }
        },
```

```
        "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
             "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the
registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC
endpoints.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
                }
            },
            "FailureMessage": {
                "target": "smithy.api#String",
                "traits": {
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                "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
          "type": "list",
          "member": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
          "type": "structure",
          "members": {
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "Status": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                "smithy.api#required": {}
              }
            },
            "Products": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
               "traits": {
                "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                "smithy.api#required": {}
              }
            },
            "LastStatusCheckDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The date of the last status check.</p>"
              }
            },
            "StatusMessage": {
              "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },

      "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
              "smithy.api#required": {}
```

```
            }
          },
          "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance user.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
            }
          },
          "AssociationDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
            }
          },
          "DisassociationDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
```

```
    "members": {
        "message": {
            "target": "smithy.api#String"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
         "smithy.api#error": "server",
        "smithy.api#httpError": 500
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
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"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
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"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
         },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
            },
            {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
            }
        ],
        "traits": {
            "aws.api#service": {
                "sdkId": "License Manager User Subscriptions",
                "arnNamespace": "license-manager-user-subscriptions",
                "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
            },
            "aws.auth#sigv4": {
                "name": "license-manager-user-subscriptions"
            },
            "aws.protocols#restJson1": {},
            "smithy.api#cors": {
                "additionalAllowedHeaders": [
                    "*",
                    "content-type",
                    "x-amz-content-sha256",
                    "x-amz-user-agent",
```

```
                "x-amzn-platform-id",
                "x-amzn-trace-id",
                "content-length",

            "x-api-key",
                "authorization",
                "x-amz-date",
                "x-amz-security-token",
                "Access-Control-Allow-Headers",
                "Access-Control-Allow-Methods",
                "Access-Control-Allow-Origin"
              ],
              "additionalExposedHeaders": [
                "x-amzn-errortype",
                "x-amzn-requestid",
                "x-amzn-trace-id"
              ]
            },
            "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
            "smithy.api#title": "AWS License Manager User Subscriptions",
            "smithy.rules#endpointRuleSet": {
              "version": "1.0",
              "parameters": {
                "Region":
{
                  "builtIn": "AWS::Region",
                  "required": false,
                  "documentation": "The AWS region used to dispatch the request.",
                  "type": "String"
                },
                "UseDualStack": {
                  "builtIn": "AWS::UseDualStack",
                  "required": true,
                  "default": false,
                  "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                  "type": "Boolean"
                },
                "UseFIPS": {
                  "builtIn": "AWS::UseFIPS",
                  "required": true,
                  "default": false,
                  "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                  "type": "Boolean"
                },
```

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    "Endpoint": {
      "builtIn": "SDK::Endpoint",
      "required": false,
      "documentation": "Override the endpoint used to send this request",
      "type": "String"
    }
  },
  "rules": [
    {
      "conditions": [
        {
          "fn": "isSet",
          "argv": [
            {
              "ref": "Endpoint"
            }
          ]
        }
      ],
      "rules": [
        {
          "conditions": [
            {
              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseFIPS"
                },
                true
              ]
            }
          ],
          "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
          "type": "error"
        },
        {
          "conditions": [
            {

              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseDualStack"
                },
                true
              ]
            }
          ],
```

```
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
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              {
                "conditions": [],
                "endpoint": {
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                    "ref": "Endpoint"
                  },

 "properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
              }
            ],
            "type": "tree"
          },
          {
            "conditions": [
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                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "aws.partition",

                    "argv": [
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
```

```
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },

true
                ]
              },
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

"fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      }
                    ]
                  },

                {
                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
```

```
                                    "supportsDualStack"
                                ]
                            }

                ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }

    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [

  {
                        "ref": "UseFIPS"
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
```

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                "fn": "booleanEquals",
                "argv": [
                  {
                    "fn": "getAttr",
                    "argv": [

            {
                        "ref": "PartitionResult"
                      },
                      "supportsFIPS"
                    ]
                  },
                  true
                ]
              }
            ],
            "rules": [
              {
                "conditions": [],
                "endpoint": {

      "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ],
            "type": "tree"
          },
          {
            "conditions": [],
            "error": "FIPS is enabled but this partition does not support FIPS",
            "type": "error"

}
          ],
          "type": "tree"
        },
        {
          "conditions": [
            {
              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseDualStack"
                },
                true
```

```
                ]
              }
            ],
            "rules": [
              {

      "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        true,
                        {
                          "fn": "getAttr",
                          "argv": [
                            {
                              "ref": "PartitionResult"
                            },
                            "supportsDualStack"
                          ]

       }
                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {
                        "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }

                ],
                  "type": "tree"
                },
                {
                  "conditions": [],
                  "error": "DualStack is enabled but this partition does not support DualStack",
                  "type": "error"
                }
              ],
              "type": "tree"
            },
            {
```

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                    "conditions": [],
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
                  }
                ],
                "type": "tree"
              }
            ],
            "type": "tree"
          },
          {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
          }
        ]
      },
      "smithy.rules#endpointTests": {
        "testCases": [
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect":
{
              "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-1",
```

```
        "UseFIPS": true,
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                }
            },
            {
                "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                }
            },
            {
                "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
                "expect": {
                    "endpoint":
{
                        "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
                    }
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                }
            },
            {
                "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
                "expect": {
                    "endpoint": {
                        "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                    }
                },
                "params": {
                    "Region": "cn-north-1",
                    "UseFIPS":
 true,
                    "UseDualStack": true
                }
            },
            {
```

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      "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
```

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            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
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            }
          },
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            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
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          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
            }
          },
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            "Region": "us-gov-east-1",
            "UseFIPS": false,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
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              "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS
```

```
and DualStack are enabled, but this partition does not support one or both"
                },
                "params": {
                  "Region": "us-iso-east-1",
                  "UseFIPS": true,
                  "UseDualStack": true
                }
              },
              {
                "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                  }
                },
                "params": {
                  "Region": "us-iso-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false

    }
              },
              {
                "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                  "error": "DualStack is enabled but this partition does not support DualStack"
                },
                "params": {
                  "Region": "us-iso-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true
                }
              },
              {
                "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
                  }

            },
                "params": {
                  "Region": "us-iso-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false
                }
              },
              {
```

```
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-isob-east-1",

 "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
        }
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
```

```
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {

     "endpoint": {
            "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack":
 false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error": "Invalid Configuration:
```

```
Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": false,
                      "UseDualStack": true,
                      "Endpoint": "https://example.com"
                    }
                  },
                  {
                    "documentation": "Missing region",
                    "expect": {
                      "error": "Invalid Configuration: Missing Region"
                    }
                  }
                ],
                "version": "1.0"
              }
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
            "type": "structure",
            "members": {
              "ProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                 "traits": {
                   "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
                }
              },
              "HealthStatus": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
                "traits": {
                  "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
                }
              },
              "Ipv4Address": {
                "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
                }
              }
            },
            "traits": {
              "smithy.api#documentation": "<p>Information
```

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 about a Remote Desktop Services (RDS) license server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
          "IdentityProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
            }
          },
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of license server.</p>"
            }
          },
          "ServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

   "traits": {
              "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
            }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
            }
          },
          "LicenseServerEndpointId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
            }
          },
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits":
 {
              "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
            }
          },
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            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
                }
            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
                }
            },

           "CreationTime": {
                "target": "smithy.api#Timestamp",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

  "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "PROVISIONING",
                    "value": "PROVISIONING",
                    "documentation": ""
                },
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            {
              "name": "PROVISIONING_FAILED",
              "value": "PROVISIONING_FAILED",
              "documentation": ""
            },
            {
              "name": "PROVISIONED",
              "value": "PROVISIONED",
              "documentation": ""
            },
            {
              "name": "DELETING",
              "value": "DELETING",
              "documentation": ""
            },
            {
              "name": "DELETION_FAILED",
              "value": "DELETION_FAILED",
              "documentation": ""

           },
            {
              "name": "DELETED",
              "value": "DELETED",
              "documentation": ""
            }
         ]
      }
   },
   "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
      "traits": {
         "smithy.api#enum": [
            {
              "name": "HEALTHY",
              "value": "HEALTHY",
              "documentation": ""
            },
            {
              "name": "UNHEALTHY",
              "value": "UNHEALTHY",
              "documentation": ""
            },
            {
              "name": "NOT_APPLICABLE",
              "value": "NOT_APPLICABLE",
              "documentation": ""
            }
```

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            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
          "type": "structure",
          "members": {
            "ServerType": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
              "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>",
                "smithy.api#required": {}
              }
            },
            "ServerSettings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
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            {

            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/identity-provider/ListIdentityProviders"
             },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "IdentityProviderSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
         "type": "structure",
         "members": {
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use
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the following filters to streamline results:</p>\n <ul>\n <li>\n <p>Product</p>\n </li>\n
<li>\n <p>DirectoryId</p>\n </li>\n </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

          "traits": {
              "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources
that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
              "smithy.api#required": {}
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
        "type": "operation",
         "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
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        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },

    {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/instance/ListInstances"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members":
{
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
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request.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n                <p>Status</p>\n            </li>\n
          <li>\n                <p>InstanceId</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
            "InstanceSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next
 token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
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        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/ListLicenseServerEndpoints"
            },

          "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "LicenseServerEndpoints"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
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            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>IdentityProviderArn</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
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        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type":
 "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
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            "items": "ProductUserSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
{
        "type": "structure",
        "members": {
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
             "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n
</li>\n          <li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating.
 This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
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            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service
 hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
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            "smithy.api#http": {
              "method": "GET",
              "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}

            }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
          "type": "structure",
          "members": {
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
          },
          "errors": [
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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which
provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
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            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {

      "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n        <ul>\n
   <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n          </li>\n
<li>\n            <p>Domain</p>\n          </li>\n        </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
         "type": "structure",
         "members": {
            "InstanceUserSummaries": {

             "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
```

```
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
          "type": "structure",
          "members": {
            "Username":
{
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for this product user.</p>",
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
             "Status": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                "smithy.api#required": {}
              }
            },
            "ProductUserArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
              }
```

```
            },
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {

            "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
               }
            },
            "SubscriptionStartDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The start date of a subscription.</p>"
               }
            },
            "SubscriptionEndDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The end date of a subscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
         "type":
 "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
         "type": "structure",
         "members": {
            "RdsSalCredentialsProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
```

```
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider":
{
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target":
"com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/RegisterIdentityProvider"
```

```
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
          "type": "structure",
          "members": {
            "IdentityProvider": {

       "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
                "smithy.api#required": {}
              }
            },
            "Settings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
              "traits":
 {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
          "type": "structure",
          "members": {
```

```
            "IdentityProviderSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
               "traits": {
                  "smithy.api#documentation":
 "<p>Metadata that describes the results of an identity provider operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",

     "smithy.api#error": "client",
            "smithy.api#httpError": 404
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
         "type": "structure",
         "members": {
            "SecretId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                  "smithy.api#length": {
                     "min": 1
                  }
               }
            }
         },
```

```
      "traits": {
        "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
      "type": "string",
      "traits": {
        "smithy.api#length": {

         "min": 5,
            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
          "Endpoint": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
             "traits": {
               "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
```

```
            "smithy.api#enum": [
               {
                  "name": "RDS_SAL",
                  "value": "RDS_SAL",
                  "documentation": ""
               }
            ]
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
         "type": "structure",
         "members": {
            "message": {

  "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Settings": {
         "type": "structure",
         "members": {
            "Subnets": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
               "traits": {
                  "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                  "smithy.api#length": {
                     "min": 1
                  },
                  "smithy.api#required": {}
               }
            },
            "SecurityGroupId": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

             "traits": {
                  "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the
```

VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC. "
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

        },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": " Starts a product subscription for a user with the specified identity provider. \n <note>\n Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/StartProductSubscription"
          }

```
    }
     },
     "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
           "Username": {
              "target": "smithy.api#String",
              "traits": {
                 "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                 "smithy.api#required": {}
              }
           },
           "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                 "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                 "smithy.api#required": {}
              }
           },
           "Product": {
              "target": "smithy.api#String",
              "traits": {

  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n         <p>Valid values:
<code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n
</p>",
                 "smithy.api#required": {}
              }
           },
           "Domain": {
              "target": "smithy.api#String",
              "traits": {
                 "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
              }
           },
           "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                 "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
              }

  }
        },
        "traits": {
           "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

    },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

    },
          {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/StopProductSubscription"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"

            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
          "type": "structure",
          "members": {
            "ProductUserSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
                "smithy.api#required": {}
              }

    }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StringList": {
          "type": "list",
          "member": {
            "target": "smithy.api#String"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
          "type": "list",
          "member": {
            "target": "smithy.api#String"
```

```
        },
        "traits": {
          "smithy.api#length": {

 "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
 "<p>Adds tags to a resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
              "smithy.api#httpLabel": {},
```

```
                "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation":
"<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
```

```
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the request.</p>",
            "smithy.api#error": "client"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {

           "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
              "method": "DELETE",
              "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want to remove tags from.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}

          }
            },
            "TagKeys": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
              "traits": {
                "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
```

```
                "smithy.api#httpQuery": "tagKeys",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
           },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {

       "code": 200,
              "method": "POST",
              "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },

          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
            }
          },
          "UpdateSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
            "traits": {
              "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n          <li>\n            <p>Subnets which you want to add to provision VPC endpoints.</p>\n          </li>\n
      <li>\n            <p>Subnets which you want to remove the VPC endpoints from.</p>\n          </li>\n
<li>\n            <p>Security
 group ID which permits traffic to the VPC endpoints.</p>\n          </li>\n        </ul>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
```

```
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
          "type": "structure",
          "members": {
            "AddSubnets": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                  "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
                  "smithy.api#required": {}
                }
              },
              "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                  "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                  "smithy.api#required": {}
                }
              },
              "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                  "smithy.api#documentation": "<p>A security group ID that
 allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for
activation servers.</p>"
                }
              }
            },
            "traits": {
              "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
            }
          },
          "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
            "type": "structure",
            "members": {
              "message": {
                "target": "smithy.api#String"
              }
            },
```

```
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
      }
    }
}
ListReceivedLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
```

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// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}
```

```
type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
```

```
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
```

```
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckInLicense",
 }
}
CheckoutLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
```

Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 Retry
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger

1.128 github.com/aws/aws-sdk-go-v2/service/dynamodb 1.43.1

1.128.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
```

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string
```

```
 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
```

```
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err =
 addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
```

```
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
```

```
      uses: actions/checkout@v2
      with:
        path: new-ref
        fetch-depth: 0
    - name: Get Diff
      run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }} ${{ github.sha }} > refDiffFiles.txt
    - name: Get Target Files
      run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
    - name: Checkout scancode
      uses: actions/checkout@v2
      with:
        repository: nexB/scancode-toolkit
        path: scancode-toolkit
        fetch-depth: 1
    - name: Set up Python ${{ matrix.python-version }}
      uses: actions/setup-python@v2
      with:
        python-version: ${{ matrix.python-version }}
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi
ListLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
```

```
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 Retry
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if
err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string
```

```
 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err !=
 nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
```

```
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
!= nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
```

```
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
```

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
```

```
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack,
 options, "ListLicenses"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "ListLicenses",
 }
}
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
```

UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

```
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpResponseCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
```

```
      },
      {
        "id": "Service",
        "namespace": "*"
      }
    ]
  },
  "shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
      "type": "service",
      "version": "2018-08-01",
      "operations": [
        {
          "target": "com.amazonaws.licensemanager#AcceptGrant"
        },

 {
          "target": "com.amazonaws.licensemanager#CheckInLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CheckoutLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CreateGrant"
        },
        {
          "target": "com.amazonaws.licensemanager#CreateGrantVersion"
        },
        {
          "target": "com.amazonaws.licensemanager#CreateLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
        },
        {
          "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
        },
        {
          "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
         },
        {
          "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
        },
        {
          "target": "com.amazonaws.licensemanager#CreateToken"
```

```
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseUsage"
    },
    {
      "target": "com.amazonaws.licensemanager#GetServiceSettings"
    },
    {
      "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
     },
    {
```

```
    "target": "com.amazonaws.licensemanager#ListDistributedGrants"
  },
  {
    "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenses"
  },
  {
    "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
  },
  {

   "target": "com.amazonaws.licensemanager#ListLicenseVersions"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedGrants"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
  },
  {
    "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
  },
  {
    "target": "com.amazonaws.licensemanager#ListResourceInventory"
  },
  {
    "target": "com.amazonaws.licensemanager#ListTagsForResource"
  },
  {
    "target": "com.amazonaws.licensemanager#ListTokens"
  },
  {
    "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
```

```
        },
        {
          "target": "com.amazonaws.licensemanager#RejectGrant"
        },
        {
          "target": "com.amazonaws.licensemanager#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanager#UntagResource"
        },
        {
          "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
        },
        {
          "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
        },
        {
          "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
        },
        {
          "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager",
          "arnNamespace": "license-manager",
          "cloudFormationName": "LicenseManager",
          "cloudTrailEventSource": "license-manager.amazonaws.com",
          "endpointPrefix": "license-manager"
        },
        "aws.auth#sigv4": {
          "name": "license-manager"
        },
        "aws.protocols#awsJson1_1": {},
        "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software vendors across multiple \n         Amazon Web Services accounts and on-premises servers.</p>",
        "smithy.api#title": "AWS License Manager",
        "smithy.api#xmlNamespace": {
          "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
        },
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
```

```
            "type": "String"
        },
        "UseDualStack": {
            "builtIn": "AWS::UseDualStack",
            "required": true,
            "default": false,
            "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
            "type": "Boolean"
        },
        "UseFIPS": {
            "builtIn": "AWS::UseFIPS",
            "required": true,
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
            "type": "Boolean"
        },
        "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
        }
    },
    "rules": [
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Endpoint"
                        }
                    ]

                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
```

```
                true
              ]
            }
          ],
          "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
          "type": "error"
        },
        {
          "conditions": [

  {
              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseDualStack"
                },
                true
              ]
            }
          ],
          "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
          "type": "error"
        },
        {
          "conditions": [],
          "endpoint": {
            "url": {
              "ref": "Endpoint"
            },
             "properties": {},
            "headers": {}
          },
          "type": "endpoint"
        }
      ],
      "type": "tree"
    },
    {
      "conditions": [
        {
          "fn": "isSet",
          "argv": [
            {
              "ref": "Region"
            }
          ]
        }
      ],
```

```
                "rules": [
                  {
                    "conditions": [
                      {

"fn": "aws.partition",
                        "argv": [
                          {
                            "ref": "Region"
                          }
                        ],
                        "assign": "PartitionResult"
                      }
                    ],
                    "rules": [
                      {
                        "conditions": [
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {
                                "ref": "UseFIPS"
                              },

                    true
                            ]
                          },
                          {
                            "fn": "booleanEquals",
                            "argv": [
                              {
                                "ref": "UseDualStack"
                              },
                              true
                            ]
                          }
                        ],
                        "rules": [
                          {
                            "conditions": [
                              {

                    "fn": "booleanEquals",
                                "argv": [
                                  true,
                                  {
                                    "fn": "getAttr",
                                    "argv": [
```

```
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                }
                            ]

        },
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                                "argv": [
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                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]

    }
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                            }
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                                "conditions": [],
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fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}
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                                "type": "endpoint"
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                    {
                        "conditions": [],
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both",
                        "type": "error"
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                    "argv": [

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                    },
                    true
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                }
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                {
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                    {
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                        {
                          "fn": "getAttr",
                          "argv": [

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                            },
                            "supportsFIPS"
                          ]
                        },
                        true
                      ]
                    }
                  ],
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          "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
                        "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }
                  ],
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```
                    },
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                      "type": "error"
                    }

                  ],
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                {
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                        },
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                    }
                  ],
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                          "fn": "booleanEquals",
                          "argv": [
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                            {
                              "fn": "getAttr",
                              "argv": [
                                {
                                  "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                              ]

 }
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                          }
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                          {
                            "conditions": [],
                            "endpoint": {
                              "url": "https://license-
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manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
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                                        "headers": {}
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                                    "type": "endpoint"
                                }

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                                    "type": "error"
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                            ],
                            "type": "tree"
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                            "conditions": [],
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                                "properties": {},

                                "headers": {}
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                            "type": "endpoint"
                        }
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                    "type": "tree"
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            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
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            "expect": {
                "endpoint":
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{
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            "params": {
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                "UseFIPS": false,
                "UseDualStack": false
            }
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            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-east-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
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            "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
            "expect": {
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                    "url": "https://license-manager.ap-northeast-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-northeast-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
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            "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.ap-northeast-2.amazonaws.com"
                }
            },
            "params": {
                "Region": "ap-northeast-2",
                "UseFIPS": false,
                "UseDualStack": false
            }
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```
        },
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          "expect": {
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            }
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          "params": {
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            "UseFIPS": false,
            "UseDualStack": false
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          "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
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            }
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          "params": {
            "Region": "ap-south-1",
            "UseFIPS": false,
            "UseDualStack": false
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          "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
          "expect": {
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          "params": {
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            "UseDualStack": false
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          "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-2.amazonaws.com"
            }
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```
      },
      "params": {
        "Region": "ap-southeast-2",
        "UseFIPS": false,
        "UseDualStack": false
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    },
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"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
      "expect": {
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        }
      },
      "params": {
        "Region": "ap-southeast-3",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.ca-central-1.amazonaws.com"
        }
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     "params": {
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        "UseFIPS": false,
        "UseDualStack": false
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    {
      "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
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      },
      "params": {
        "Region": "eu-central-1",
        "UseFIPS": false,
        "UseDualStack": false
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    },
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FIPS disabled and DualStack disabled",
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                      "url": "https://license-manager.eu-north-1.amazonaws.com"
                    }
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                  "params": {
                    "Region": "eu-north-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
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                    }
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                  "params": {
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"eu-south-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
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                  "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
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                    "endpoint": {
                      "url": "https://license-manager.eu-west-1.amazonaws.com"
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                  },
                  "params": {
                    "Region": "eu-west-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
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                  "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
                  "expect": {

                   "endpoint": {
                      "url": "https://license-manager.eu-west-2.amazonaws.com"
                    }
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      },
      "params": {
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        "UseFIPS": false,
        "UseDualStack": false
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      "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
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      "params": {
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        "UseFIPS": false,

"UseDualStack": false
      }
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      "expect": {
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          "url": "https://license-manager.me-south-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "me-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
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      "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
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          "url": "https://license-manager.sa-east-1.amazonaws.com"
         }
      },
      "params": {
        "Region": "sa-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
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```
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      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
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    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
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          "url": "https://license-manager-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-east-2.amazonaws.com"
        }

     },
      "params": {
        "Region": "us-east-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-east-2.amazonaws.com"
        }
      },
      "params": {
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            "Region": "us-east-2",
            "UseFIPS": true,
            "UseDualStack": false
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          "documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-west-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-west-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
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          "expect": {
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              "url": "https://license-manager-fips.us-west-1.amazonaws.com"
            }
          },
          "params": {

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            "UseFIPS": true,
            "UseDualStack": false
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          "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
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            "endpoint": {
              "url": "https://license-manager.us-west-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-west-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",
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                      "url": "https://license-manager-fips.us-west-2.amazonaws.com"
                    }
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                  "params": {
                    "Region": "us-west-2",
                    "UseFIPS": true,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-fips.us-east-1.api.aws"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                     "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager.us-east-1.api.aws"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
                    }
                  },
                  "params": {
                    "Region": "cn-north-1",
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```
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
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          "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-northwest-1",
            "UseFIPS": false,
            "UseDualStack": false

}
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
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          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
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          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
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```
            "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
          }
        },
        "params": {
          "Region": "cn-north-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
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        "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.us-gov-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"

}
        },
        "params": {
          "Region": "us-gov-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.us-gov-west-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-west-1",
          "UseFIPS": false,
          "UseDualStack": false
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      }
    },
    {
      "documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
      "expect": {
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          "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-west-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-gov-east-1.api.aws"
        }
      },

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        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-east-1.api.aws"
        }
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      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
      "expect": {
        "endpoint": {
```

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            "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
          }
        },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
          "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
        },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": true,
           "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
          }
        },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
          "error": "DualStack is enabled
but this partition does not support DualStack"
        },
        "params": {
          "Region": "us-iso-east-1",
          "UseFIPS": false,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
```

```
            "endpoint": {
              "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },

        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },

      "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
```

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                "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

    "expect": {
                    "endpoint": {
                      "url": "https://example.com"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://example.com"
                    }
                  },
                  "params": {
                    "UseFIPS": false,

      "UseDualStack": false,
                    "Endpoint": "https://example.com"
                  }
                },
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                  "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                  "expect": {
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                  },
                  "params": {
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                    "UseFIPS": true,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                  }
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                {
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                  "expect": {
                    "error":
 "Invalid Configuration: Dualstack and custom endpoint are not supported"
                  },
                  "params": {
```

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                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
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                {
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                  "expect": {
                    "error": "Invalid Configuration: Missing Region"
                  }
                }
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              "version": "1.0"
            }
          }
        },
        "com.amazonaws.licensemanager#AcceptGrant": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
          "output": {
            "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
```

```
    }
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        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
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    "com.amazonaws.licensemanager#AcceptGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
```

```
  "com.amazonaws.licensemanager#AccessDeniedException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
        "httpResponseCode": 401
      },
      "smithy.api#documentation": "<p>Access to resource denied.</p>",
      "smithy.api#error": "client",
      "smithy.api#httpError": 401
    }
  },
  "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
    "type": "enum",
    "members": {
      "DISTRIBUTED_GRANTS_ONLY": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
        }
      },
      "ALL_GRANTS_PERMITTED_BY_ISSUER": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
        }
      }
    }
  },
  "com.amazonaws.licensemanager#AllowedOperation": {

  "type": "enum",
    "members": {
      "CREATE_GRANT": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "CreateGrant"
        }
      },
      "CHECKOUT_LICENSE": {
        "target": "smithy.api#Unit",
        "traits": {
```

```
                "smithy.api#enumValue": "CheckoutLicense"
              }
            },
            "CHECKOUT_BORROW_LICENSE": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "CheckoutBorrowLicense"
              }
            },
            "CHECK_IN_LICENSE": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "CheckInLicense"
              }
            },
            "EXTEND_CONSUMPTION_LICENSE":
{
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "ExtendConsumptionLicense"
              }
            },
            "LIST_PURCHASED_LICENSES": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "ListPurchasedLicenses"
              }
            },
            "CREATE_TOKEN": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "CreateToken"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#AllowedOperationList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#AllowedOperation"
          },
          "traits": {
            "smithy.api#length": {
              "min": 1,
              "max":
8
            }
          }
```

```
    },
    "com.amazonaws.licensemanager#Arn": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 2048
        },
        "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
      }
    },
    "com.amazonaws.licensemanager#ArnList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#Arn"
      }
    },
    "com.amazonaws.licensemanager#AuthorizationException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError":
{
          "code": "AuthorizationFailure",
          "httpResponseCode": 403
        },
        "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to perform the action. Check the IAM\n        policy associated with this account.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 403
      }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
      "type": "structure",
      "members": {
        "LastRunTime": {
          "target": "com.amazonaws.licensemanager#DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
          }
        }
      },
      "traits": {
```

```
            "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
    },

 "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
            "smithy.api#default": false
        }
    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
            "AllowEarlyCheckIn": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxTimeToLiveInMinutes": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                    "smithy.api#required": {}
                }
            }

},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
```

```
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"

        },
            {
              "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
          }
        },
        "com.amazonaws.licensemanager#CheckInLicenseRequest":
 {
          "type": "structure",
          "members": {
            "LicenseConsumptionToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>",
                "smithy.api#required": {}
              }
            },
            "Beneficiary": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
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                "smithy.api#documentation": "<p>License beneficiary.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#CheckInLicenseResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
```

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                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
{
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                    "smithy.api#required": {}
                }
            },
            "DigitalSignatureMethod": {
                "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
                "traits": {
                    "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n         For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
                    "smithy.api#required": {}
                }
            },
            "NodeId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Node ID.</p>"
```

```
            }
          },
          "CheckoutMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Information about constraints.</p>"
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation":
"<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License consumption token.</p>"
            }
          },
          "EntitlementsAllowed":
{
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
```

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            },
            "SignedToken": {
              "target": "com.amazonaws.licensemanager#SignedToken",
              "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
              }
            },
            "IssuedAt": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
              }
            },
            "Expiration": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
              }
            },
            "CheckoutMetadata": {
              "target": "com.amazonaws.licensemanager#MetadataList",
              "traits": {
                "smithy.api#documentation": "<p>Information about constraints.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#CheckoutLicense": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

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            },
            {
              "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target":
"com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n          <p>If the
account that created the license is the same that is performing the check out, you must\n            specify the account
as the beneficiary.</p>\n        </note>"
          }
        },
        "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
          "type": "structure",
          "members": {
            "ProductSKU": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Product
SKU.</p>",
                "smithy.api#required": {}
              }
            },
            "CheckoutType": {
              "target": "com.amazonaws.licensemanager#CheckoutType",
              "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>",
                "smithy.api#required": {}
              }
            },
```

```
        "KeyFingerprint": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementDataList",
          "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>",

      "smithy.api#required": {}
          }
        },
        "ClientToken": {
          "target": "com.amazonaws.licensemanager#ClientToken",
          "traits": {
            "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
            "smithy.api#required": {}
          }
        },
        "Beneficiary": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License beneficiary.</p>"
          }
        },
        "NodeId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Node ID.</p>"
          }
        }
      },
      "traits": {

      "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseResponse": {
      "type": "structure",
      "members": {
        "CheckoutType": {
          "target": "com.amazonaws.licensemanager#CheckoutType",
          "traits": {
            "smithy.api#documentation": "<p>Checkout type.</p>"
```

```
            }
          },
          "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License consumption token.</p>"
            }
          },
          "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
          },
           "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
              "smithy.api#documentation": "<p>Signed token.</p>"
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
          },
          "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
          },
          "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
            }
          },
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
```

```
    }
  },
  "com.amazonaws.licensemanager#CheckoutType": {
    "type": "enum",
    "members": {
      "PROVISIONAL": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PROVISIONAL"
        }
      },
      "PERPETUAL": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PERPETUAL"
        }
       }
    }
  },
  "com.amazonaws.licensemanager#ClientRequestToken": {
    "type": "string",
    "traits": {
      "smithy.api#length": {
        "min": 1,
        "max": 36
      }
    }
  },
  "com.amazonaws.licensemanager#ClientToken": {
    "type": "string",
    "traits": {
      "smithy.api#length": {
        "min": 0,
        "max": 2048
      },
      "smithy.api#pattern": "^\\S+$"
    }
  },
  "com.amazonaws.licensemanager#ConflictException": {
    "type": "structure",
    "members": {
      "Message": {
        "target": "com.amazonaws.licensemanager#Message"
      }
    },
    "traits": {
      "aws.protocols#awsQueryError": {
        "code": "ConflictException",
```

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            "httpResponseCode":
409
          },
          "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 409
        }
      },
      "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
            }
          },
          "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
            }
          }
        },

  "traits": {
          "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
      },
      "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
      },
      "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
          "RenewType": {
            "target": "com.amazonaws.licensemanager#RenewType",
            "traits": {
              "smithy.api#documentation": "<p>Renewal frequency.</p>"
            }
          },
          "ProvisionalConfiguration": {
            "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
              }
            },
            "BorrowConfiguration": {
              "target": "com.amazonaws.licensemanager#BorrowConfiguration",
              "traits": {
                "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
          }
        },
        "com.amazonaws.licensemanager#CreateGrant": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target":
"com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
```

```
license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
          }
       },
       "com.amazonaws.licensemanager#CreateGrantRequest": {
          "type": "structure",
          "members": {
             "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                   "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                   "smithy.api#required": {}
                }
             },
             "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                   "smithy.api#documentation": "<p>Grant name.</p>",
                   "smithy.api#required": {}

       }
             },
             "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                   "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                   "smithy.api#required": {}
                }
             },
             "Principals": {
                "target": "com.amazonaws.licensemanager#PrincipalArnList",
                "traits": {
                   "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an
Amazon Resource Name\n        (ARN):</p>\n        <ul>\n        <li>\n        <p>An Amazon Web Services
account, which includes only the account specified.</p>\n        </li>\n        </ul>\n        <ul>\n        <li>\n
    <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n        </li>\n        </ul>\n
<ul>\n
          <li>\n        <p>An organization, which will include all accounts across your organization.</p>\n
</li>\n        </ul>",
                   "smithy.api#required": {}
                }
             },
             "HomeRegion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

```
                "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowedOperations": {
              "target": "com.amazonaws.licensemanager#AllowedOperationList",
              "traits": {
                "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
                "smithy.api#required": {}
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanager#TagList",

           "traits": {
                "smithy.api#documentation": "<p>Tags to add to the grant. For more information about tagging
support in\n        License Manager, see the <a href=\"https://docs.aws.amazon.com/license-
manager/latest/APIReference/API_TagResource.html\">TagResource</a> operation.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#CreateGrantResponse": {
          "type": "structure",
          "members": {
            "GrantArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanager#GrantStatus",
              "traits": {
                "smithy.api#documentation":
 "<p>Grant status.</p>"
              }
            },
            "Version": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
              }
            }
          },
```

```
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateGrantVersion": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information,
see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"

      }
    },
    "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
```

```
            "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
            "smithy.api#required": {}
          }
        },
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
          }
        },
        "GrantName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {

      "smithy.api#documentation": "<p>Grant name.</p>"
          }
        },
        "AllowedOperations": {
          "target": "com.amazonaws.licensemanager#AllowedOperationList",
          "traits": {
            "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "StatusReason": {
          "target": "com.amazonaws.licensemanager#StatusReasonMessage",
          "traits": {
            "smithy.api#documentation": "<p>Grant status reason.</p>"
          }
        },
        "SourceVersion": {
          "target": "com.amazonaws.licensemanager#String",
           "traits": {
            "smithy.api#documentation": "<p>Current version of the grant.</p>"
          }
        },
        "Options": {
          "target": "com.amazonaws.licensemanager#Options",
          "traits": {
            "smithy.api#documentation": "<p>The options specified for the grant.</p>"
          }
```

```
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
             "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },

       {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
```

```
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
      "type": "operation",
      "input": {

"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
```

```
    ],
      "traits": {
        "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or all of these), license affinity to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the license configuration.</p>",
             "smithy.api#required": {}
          }
        },
        "Description": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Description of the license configuration.</p>"
          }
        },
        "LicenseCountingType": {
          "target": "com.amazonaws.licensemanager#LicenseCountingType",
          "traits": {
            "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseCount": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"

  }
        },
        "LicenseCountHardLimit": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used. Exceeding a hard limit\n        blocks the launch of new instances.</p>"
          }
        },
```

```
            "LicenseRules": {
              "target": "com.amazonaws.licensemanager#StringList",
              "traits": {
                "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n          <li>\n            <p>\n              <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
        <code>licenseAffinityToHost</code> |\n            <code>maximumCores</code> |
<code>minimumCores</code>\n
          </p>\n          </li>\n          <li>\n            <p>\n              <code>Instances</code> dimension:
<code>allowedTenancy</code> | \n            <code>maximumVcpus</code> | <code>minimumVcpus</code>\n
      </p>\n          </li>\n          <li>\n            <p>\n              <code>Sockets</code> dimension:
<code>allowedTenancy</code> | \n            <code>licenseAffinityToHost</code> |\n
<code>maximumSockets</code> | <code>minimumSockets</code>\n            </p>\n          </li>\n          <li>\n
        <p>\n              <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n            <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n            </p>\n          </li>\n        </ul>\n        <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code>
 are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n        <code>EC2-
DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanager#TagList",
              "traits": {
                "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
              }
            },
            "DisassociateWhenNotFound": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
              }
            },
            "ProductInformationList": {
              "target": "com.amazonaws.licensemanager#ProductInformationList",
               "traits": {
                "smithy.api#documentation": "<p>Product information.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
```

```
      "type": "structure",
      "members": {
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],

    "traits": {
        "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
      "type": "structure",
```

```
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting the license type for.</p>",
              "smithy.api#required": {}
            }
          },
          "SourceLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information that identifies the license type you are converting from. \n\n For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in the <i>License Manager User Guide</i>.</p>",
              "smithy.api#required": {}
            }
          },
          "DestinationLicenseContext": {
            "target": "com.amazonaws.licensemanager#LicenseConversionContext",
            "traits": {
              "smithy.api#documentation": "<p>Information that identifies the license type you are converting to. For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in the <i>License Manager User Guide</i>.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
```

```
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
      },
      "errors":
[
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }

    ],
      "traits": {
        "smithy.api#documentation": "<p>Creates a report generator.</p>"
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
      "type": "structure",
      "members": {
        "ReportGeneratorName": {
          "target": "com.amazonaws.licensemanager#ReportGeneratorName",
          "traits": {
            "smithy.api#documentation": "<p>Name of the report generator.</p>",
            "smithy.api#required": {}
```

```
            }
        },
        "Type": {
            "target": "com.amazonaws.licensemanager#ReportTypeList",
            "traits": {
                "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be
generated:</p>\n        <ul>\n        <li>\n        <p>License configuration report - Reports the number and
details
 of consumed licenses for a license configuration.</p>\n        </li>\n        <li>\n        <p>Resource report -
Reports the tracked licenses and resource consumption for a license configuration.</p>\n        </li>\n        </ul>",
                "smithy.api#required": {}
            }
        },
        "ReportContext": {
            "target": "com.amazonaws.licensemanager#ReportContext",
            "traits": {
                "smithy.api#documentation": "<p>Defines the type of license configuration the report generator
tracks.</p>",
                "smithy.api#required": {}
            }
        },
        "ReportFrequency": {
            "target": "com.amazonaws.licensemanager#ReportFrequency",
            "traits": {
                "smithy.api#documentation": "<p>Frequency by which reports are generated.  Reports can be
generated daily, monthly, or
 weekly.</p>",
                "smithy.api#required": {}
            }
        },
        "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientRequestToken",
            "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                "smithy.api#required": {}
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
                "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
          "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
generator.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>License name.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product name.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product SKU.</p>",
              "smithy.api#required": {}
            }
          },
```

```
        "Issuer": {
          "target": "com.amazonaws.licensemanager#Issuer",
          "traits": {
            "smithy.api#documentation": "<p>License issuer.</p>",
            "smithy.api#required": {}

  }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region for the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
            "smithy.api#required": {}
          }
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
          "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>",
            "smithy.api#required": {}

    }
        },
        "Beneficiary": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License beneficiary.</p>",
            "smithy.api#required": {}
          }
        },
        "ConsumptionConfiguration": {
          "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n          usage.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseMetadata": {
```

```
                "target": "com.amazonaws.licensemanager#MetadataList",

    "traits": {
                    "smithy.api#documentation": "<p>Information about the license.</p>"
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>Tags to add to the license. For more information about tagging
support in\n          License Manager, see the <a href=\"https://docs.aws.amazon.com/license-
manager/latest/APIReference/API_TagResource.html\">TagResource</a> operation.</p>"
                }
            }

        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License version.</p>"
                }
```

```
        }

    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
    "type": "structure",
    "members": {
```

```
            "LicenseArn": {
               "target": "com.amazonaws.licensemanager#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                  "smithy.api#required":
{}
               }
            },
            "LicenseName": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>License name.</p>",
                  "smithy.api#required": {}
               }
            },
            "ProductName": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Product name.</p>",
                  "smithy.api#required": {}
               }
            },
            "Issuer": {
               "target": "com.amazonaws.licensemanager#Issuer",
               "traits": {
                  "smithy.api#documentation": "<p>License issuer.</p>",
                  "smithy.api#required": {}
               }
            },
            "HomeRegion": {

 "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Home Region of the license.</p>",
                  "smithy.api#required": {}
               }
            },
            "Validity": {
               "target": "com.amazonaws.licensemanager#DatetimeRange",
               "traits": {
                  "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                  "smithy.api#required": {}
               }
            },
            "LicenseMetadata": {
               "target": "com.amazonaws.licensemanager#MetadataList",
               "traits": {
```

```
                "smithy.api#documentation": "<p>Information about the license.</p>"
              }
            },
            "Entitlements": {
              "target": "com.amazonaws.licensemanager#EntitlementList",
               "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>",
                "smithy.api#required": {}
              }
            },
            "ConsumptionConfiguration": {
              "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
              "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for workloads with offline\n          usage.</p>",
                "smithy.api#required": {}
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanager#LicenseStatus",
              "traits": {
                "smithy.api#documentation": "<p>License status.</p>",

  "smithy.api#required": {}
              }
            },
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientToken",
              "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            },
            "SourceVersion": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Current version of the license.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
          "type": "structure",
```

```
    "members": {
      "LicenseArn": {

"target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>License ARN.</p>"
        }
      },
      "Version": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>New version of the license.</p>"
        }
      },
      "Status": {
        "target": "com.amazonaws.licensemanager#LicenseStatus",
        "traits": {
          "smithy.api#documentation": "<p>License status.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#CreateToken": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateTokenRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateTokenResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#RedirectException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"

          },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n         <p>A refresh token is a JWT token used to get an access token. With an access token,\n         you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n         call License Manager to manage the specified license.</p>"
         }
      },
      "com.amazonaws.licensemanager#CreateTokenRequest": {
         "type": "structure",
         "members": {
            "LicenseArn": {
               "target": "com.amazonaws.licensemanager#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n         JWT token.</p>",
                  "smithy.api#required":
{}
               }
            },
            "RoleArns": {
               "target": "com.amazonaws.licensemanager#ArnList",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the token. \n         License Manager does not check whether the roles are in use.</p>"
               }
            },
            "ExpirationInDays": {
               "target": "com.amazonaws.licensemanager#Integer",
               "traits": {
                  "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The default is 365 days.</p>"
               }
            },
            "TokenProperties": {
               "target": "com.amazonaws.licensemanager#MaxSize3StringList",
               "traits": {
                  "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT
```

```
token. The data is mapped\n          to the amr claim of the JWT token.</p>"
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
        "members": {
          "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token ID.</p>"
            }
          },
          "TokenType": {
            "target": "com.amazonaws.licensemanager#TokenType",
             "traits": {
              "smithy.api#documentation": "<p>Token type.</p>"
            }
          },
          "Token": {
            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
              "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DateTime": {
        "type": "timestamp"
      },
      "com.amazonaws.licensemanager#DatetimeRange": {
        "type": "structure",
        "members": {
          "Begin": {
```

```
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Start of the time range.</p>",
              "smithy.api#required":
{}
            }
          },
          "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>End of the time range.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
        }
      },
      "com.amazonaws.licensemanager#DeleteGrant": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
           },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
```

```
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes the specified grant.</p>"
        }
      },
      "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
          "GrantArn": {

       "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          },
          "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
              "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the grant.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteGrantResponse":
{
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
```

```
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicense":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
           },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n            <p>You cannot
delete a license configuration that is in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license
 configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {

           "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n          <p>This action
deletes
```

```
 the report generator, which stops it from generating future reports.\n The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
          "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {

          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          },
          "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the license.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
```

```
    }
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {

 "type": "structure",
   "members": {
      "Status": {
         "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
         "traits": {
            "smithy.api#documentation": "<p>License status.</p>"
         }
      },
      "DeletionDate": {
         "target": "com.amazonaws.licensemanager#ISO8601DateTime",
         "traits": {
            "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
         }
      }
   },
   "traits": {
      "smithy.api#output": {}
   }
},
"com.amazonaws.licensemanager#DeleteToken": {
   "type": "operation",
   "input": {
      "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
   },
   "output": {
      "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
    },
   "errors": [
      {
         "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
         "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
         "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
         "target": "com.amazonaws.licensemanager#RedirectException"
      },
      {
         "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
      },
      {
```

```
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes the specified token.
Must be called in the license home Region.</p>"
        }
      },
      "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
          "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token ID.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "enum",
        "members": {
          "JWT_PS384": {
            "target": "smithy.api#Unit",

            "traits": {
              "smithy.api#enumValue": "JWT_PS384"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#Entitlement": {
        "type": "structure",
        "members": {
```

```
            "Name": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement name.</p>",
                "smithy.api#required": {}
              }
            },
            "Value": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement resource. Use only if the unit is None.</p>"
              }
            },
            "MaxCount": {
              "target": "com.amazonaws.licensemanager#Long",
              "traits": {
                "smithy.api#documentation":
"<p>Maximum entitlement count. Use if the unit is not None.</p>"
              }
            },
            "Overage": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
              }
            },
            "Unit": {
              "target": "com.amazonaws.licensemanager#EntitlementUnit",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement unit.</p>",
                "smithy.api#required": {}
              }
            },
            "AllowCheckIn": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
              }
            }

        },
        "traits": {
          "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
        }
      },
      "com.amazonaws.licensemanager#EntitlementData": {
        "type": "structure",
        "members": {
```

```
            "Name": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement data name.</p>",
                "smithy.api#required": {}
              }
            },
            "Value": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement data value.</p>"
              }
            },
            "Unit": {
              "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
              "traits": {

    "smithy.api#documentation": "<p>Entitlement data unit.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
          }
        },
        "com.amazonaws.licensemanager#EntitlementDataList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#EntitlementData"
          }
        },
        "com.amazonaws.licensemanager#EntitlementDataUnit": {
          "type": "enum",
          "members": {
            "COUNT": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Count"
              }
            },
            "NONE": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue":
    "None"
              }
            },
```

```
        "SECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Seconds"
          }
        },
        "MICROSECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Microseconds"
          }
        },
        "MILLISECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Milliseconds"
          }
        },
        "BYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bytes"
          }
        },
        "KILOBYTES": {
          "target": "smithy.api#Unit",

    "traits": {
            "smithy.api#enumValue": "Kilobytes"
          }
        },
        "MEGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabytes"
          }
        },
        "GIGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes"
          }
        },
        "TERABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabytes"
          }
```

```
    },
    "BITS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Bits"
      }
    },
    "KILOBITS": {

"target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Kilobits"
      }
    },
    "MEGABITS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Megabits"
      }
    },
    "GIGABITS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Gigabits"
      }
    },
    "TERABITS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Terabits"
      }
    },
    "PERCENT": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Percent"
      }

},
    "BYTES_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Bytes/Second"
      }
    },
    "KILOBYTES_PER_SECOND": {
      "target": "smithy.api#Unit",
      "traits": {
```

```
            "smithy.api#enumValue": "Kilobytes/Second"
          }
        },
        "MEGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabytes/Second"
          }
        },
        "GIGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes/Second"
          }
        },
        "TERABYTES_PER_SECOND": {
          "target":
"smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabytes/Second"
          }
        },
        "BITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits/Second"
          }
        },
        "KILOBITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits/Second"
          }
        },
        "MEGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabits/Second"
          }
        },
        "GIGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue":
"Gigabits/Second"
          }
        },
        "TERABITS_PER_SECOND": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Terabits/Second"
            }
        },
        "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count/Second"
            }
        }
    }
},
"com.amazonaws.licensemanager#EntitlementList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Entitlement"
    }
},
"com.amazonaws.licensemanager#EntitlementNotAllowedException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }

 },
    "traits": {
        "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#EntitlementUnit": {
    "type": "enum",
    "members": {
        "COUNT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count"
            }
        },
        "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "None"
            }
        },
```

```
    "SECONDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Seconds"
      }
    },
    "MICROSECONDS": {

     "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Microseconds"
      }
    },
    "MILLISECONDS": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Milliseconds"
      }
    },
    "BYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Bytes"
      }
    },
    "KILOBYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Kilobytes"
      }
    },
    "MEGABYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Megabytes"

}
    },
    "GIGABYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Gigabytes"
      }
    },
    "TERABYTES": {
      "target": "smithy.api#Unit",
      "traits": {
        "smithy.api#enumValue": "Terabytes"
```

```
        }
      },
      "BITS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Bits"
        }
      },
      "KILOBITS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Kilobits"
        }
      },
      "MEGABITS": {
        "target": "smithy.api#Unit",
        "traits": {

"smithy.api#enumValue": "Megabits"
        }
      },
      "GIGABITS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Gigabits"
        }
      },
      "TERABITS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Terabits"
        }
      },
      "PERCENT": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Percent"
        }
      },
      "BYTES_PER_SECOND": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Bytes/Second"
        }
      },
      "KILOBYTES_PER_SECOND": {
        "target":
```

```
"smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Kilobytes/Second"
            }
          },
          "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Megabytes/Second"
            }
          },
          "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Gigabytes/Second"
            }
          },
          "TERABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Terabytes/Second"
            }
          },
          "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {

  "smithy.api#enumValue": "Bits/Second"
            }
          },
          "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Kilobits/Second"
            }
          },
          "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Megabits/Second"
            }
          },
          "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Gigabits/Second"
            }
          },
```

```
            "TERABITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Terabits/Second"
                }
            },

            "COUNT_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Count/Second"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsage": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ConsumedValue": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxCount":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
                }
            },
            "Unit": {
                "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
                "traits": {
                    "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
```

```
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#EntitlementUsageList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumption":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
```

```
        "LicenseConsumptionToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License consumption token.</p>",
            "smithy.api#required": {}
          }
        },
        "DryRun": {
          "target": "com.amazonaws.licensemanager#Boolean",
          "traits": {
            "smithy.api#default": false,

       "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
      "type": "structure",
      "members": {
        "LicenseConsumptionToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License consumption token.</p>"
          }
        },
        "Expiration": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Date and time at which the
 license consumption expires.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#FailedDependencyException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        },
```

```
            "ErrorCode": {
                "target": "com.amazonaws.licensemanager#String"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FailedDependency",
                "httpResponseCode": 424
            },
            "smithy.api#documentation": "<p>A dependency required to run the API is missing.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 424
        }
    },
    "com.amazonaws.licensemanager#Filter":
{
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#FilterName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanager#FilterValues",
                "traits": {
                    "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only
specify one value for the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a\n          describe operation. Filters can be used to match a set of resources by specific criteria,\n          such as
tags, attributes, or IDs.</p>"

        }
    },
    "com.amazonaws.licensemanager#FilterLimitExceededException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
```

```
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
          },
          "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },
      "com.amazonaws.licensemanager#FilterList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Filter"
        }
      },
      "com.amazonaws.licensemanager#FilterName": {
        "type": "string"
      },
      "com.amazonaws.licensemanager#FilterValue":
{
        "type": "string"
      },
      "com.amazonaws.licensemanager#FilterValues": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#FilterValue",
          "traits": {
            "smithy.api#xmlName": "item"
          }
        }
      },
      "com.amazonaws.licensemanager#Filters": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Filter",
          "traits": {
            "smithy.api#xmlName": "item"
          }
        }
      },
      "com.amazonaws.licensemanager#GetAccessToken": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
        },
```

```
    "errors": [
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access tokens\n          are valid for one hour.</p>"
         }
      },
      "com.amazonaws.licensemanager#GetAccessTokenRequest": {
         "type": "structure",
         "members": {
            "Token":
{
               "target": "com.amazonaws.licensemanager#TokenString",
               "traits": {
                  "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                  "smithy.api#required": {}
               }
            },
            "TokenProperties": {
               "target": "com.amazonaws.licensemanager#MaxSize3StringList",
               "traits": {
                  "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanager#GetAccessTokenResponse": {
         "type": "structure",
         "members": {
```

```
        "AccessToken": {
          "target": "com.amazonaws.licensemanager#TokenString",
          "traits": {

     "smithy.api#documentation": "<p>Temporary access token.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetGrant": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetGrantRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
         },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
      }
    },
    "com.amazonaws.licensemanager#GetGrantRequest": {
```

```
    "type": "structure",
    "members": {
      "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
          "smithy.api#required": {}
        }
      },
      "Version": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Grant version.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#GetGrantResponse": {
    "type": "structure",
    "members": {
      "Grant": {
        "target": "com.amazonaws.licensemanager#Grant",
        "traits": {
          "smithy.api#documentation": "<p>Grant details.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#GetLicense": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#GetLicenseRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#GetLicenseResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Gets detailed
 information about the specified license.</p>"
         }
      },
      "com.amazonaws.licensemanager#GetLicenseConfiguration": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
             }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
 configuration.</p>"
         }
```

```
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
      "type": "structure",
      "members": {
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
      "type": "structure",
      "members": {
        "LicenseConfigurationId":
{
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
          }
        },
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
          }
        },
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the license configuration.</p>"
          }
        },
        "Description": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation":
"<p>Description of the license configuration.</p>"
          }
        },
        "LicenseCountingType": {
          "target": "com.amazonaws.licensemanager#LicenseCountingType",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses.</p>"
            }
        },
        "LicenseCountHardLimit": {

 "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License configuration status.</p>"
            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the owner
of the license configuration.</p>"
            }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
            }
        },
```

```
            "ManagedResourceSummaryList": {
              "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanager#TagList",
              "traits": {
                "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
              }
            },
            "ProductInformationList":
{
              "target": "com.amazonaws.licensemanager#ProductInformationList",
              "traits": {
                "smithy.api#documentation": "<p>Product information.</p>"
              }
            },
            "AutomatedDiscoveryInformation": {
              "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
              "traits": {
                "smithy.api#documentation": "<p>Automated discovery information.</p>"
              }
            },
            "DisassociateWhenNotFound": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#GetLicenseConversionTask":
{
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
          },
          "errors": [
            {
```

```
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information
on.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
```

```
conversion task is associated with.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type converted from.</p>"
                }
            },
            "DestinationLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                 "traits": {
                    "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
                }
            },
            "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task
 was started .</p>"
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
                }
            }
        },
```

```
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"

  },
      "output": {
        "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
         },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
      }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
      "type": "structure",
      "members": {
        "LicenseManagerReportGeneratorArn": {
          "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse":
{
        "type": "structure",
        "members": {
          "ReportGenerator": {
            "target": "com.amazonaws.licensemanager#ReportGenerator",
            "traits": {
              "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          },
          "Version": {
            "target":
 "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
```

```
    "com.amazonaws.licensemanager#GetLicenseResponse": {
      "type": "structure",
      "members": {
        "License": {
          "target": "com.amazonaws.licensemanager#License",
          "traits": {
            "smithy.api#documentation": "<p>License details.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseUsage": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
      },
      "output":
{
        "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified
license.</p>"
      }
    },
```

```
"com.amazonaws.licensemanager#GetLicenseUsageRequest": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#GetLicenseUsageResponse": {
    "type": "structure",
    "members": {
        "LicenseUsage": {
            "target": "com.amazonaws.licensemanager#LicenseUsage",
            "traits": {
                "smithy.api#documentation": "<p>License usage details.</p>"
            }
        }
    },
     "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#GetServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
```

```
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {
            "smithy.api#documentation":
 "<p>Gets the License Manager settings for the current Region.</p>"
          }
        },
        "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
          "type": "structure",
          "members": {
            "S3BucketArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n         and so on.</p>"
              }
            },
            "SnsTopicArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>SNS topic configured
 to receive notifications from License Manager.</p>"
              }
            },
            "OrganizationConfiguration": {
              "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
              "traits": {
                "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n         cross-account discovery.</p>"
              }
            },
            "EnableCrossAccountsDiscovery": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
              }
            },
            "LicenseManagerResourceShareArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
```

```
                "smithy.api#documentation": "<p>Amazon
 Resource Name (ARN) of the resource share. The License Manager management account \n          provides member
accounts with access to this share.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#Grant": {
          "type": "structure",
          "members": {
            "GrantArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
              }
            },
            "GrantName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Grant name.</p>",
                "smithy.api#required": {}

    }
            },
            "ParentArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Parent ARN.</p>",
                "smithy.api#required": {}
              }
            },
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>License ARN.</p>",
                "smithy.api#required": {}
              }
            },
            "GranteePrincipalArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The grantee principal ARN.</p>",
                "smithy.api#required": {}
              }
```

```
            },
            "HomeRegion": {
               "target": "com.amazonaws.licensemanager#String",
                "traits": {
                  "smithy.api#documentation": "<p>Home Region of the grant.</p>",
                  "smithy.api#required": {}
               }
            },
            "GrantStatus": {
               "target": "com.amazonaws.licensemanager#GrantStatus",
               "traits": {
                  "smithy.api#documentation": "<p>Grant status.</p>",
                  "smithy.api#required": {}
               }
            },
            "StatusReason": {
               "target": "com.amazonaws.licensemanager#StatusReasonMessage",
               "traits": {
                  "smithy.api#documentation": "<p>Grant status reason.</p>"
               }
            },
            "Version": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation":
"<p>Grant version.</p>",
                  "smithy.api#required": {}
               }
            },
            "GrantedOperations": {
               "target": "com.amazonaws.licensemanager#AllowedOperationList",
               "traits": {
                  "smithy.api#documentation": "<p>Granted operations.</p>",
                  "smithy.api#required": {}
               }
            },
            "Options": {
               "target": "com.amazonaws.licensemanager#Options",
               "traits": {
                  "smithy.api#documentation": "<p>The options specified for the grant.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes a grant.</p>"
         }
      },
      "com.amazonaws.licensemanager#GrantList": {
```

```
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#Grant"
    }
  },
  "com.amazonaws.licensemanager#GrantStatus": {
    "type": "enum",
    "members": {
      "PENDING_WORKFLOW": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PENDING_WORKFLOW"
        }
      },
      "PENDING_ACCEPT": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PENDING_ACCEPT"
        }
      },
      "REJECTED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "REJECTED"
        }
      },
      "ACTIVE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "ACTIVE"
        }
      },
      "FAILED_WORKFLOW": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "FAILED_WORKFLOW"
        }
      },
      "DELETED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "DELETED"
        }
      },
      "PENDING_DELETE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PENDING_DELETE"
```

```
            }
          },
          "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISABLED"
            }
          },
          "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits":
{
              "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#GrantedLicense": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>"
            }
          },
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product name.</p>"

         }
          },
          "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product SKU.</p>"
            }
          },
          "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
```

```
            "smithy.api#documentation": "<p>Granted license issuer.</p>"
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the granted license.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseStatus",
          "traits": {
            "smithy.api#documentation":
 "<p>Granted license status.</p>"
          }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
 ISO8601-UTC format.</p>"
          }
        },
        "Beneficiary": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
          }
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
          "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>"
          }
        },
        "ConsumptionConfiguration": {

 "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
          }
        },
        "LicenseMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
            "smithy.api#documentation": "<p>Granted license metadata.</p>"
          }
        },
```

```
            "CreateTime": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Creation time of the granted license.</p>"
              }
            },
            "Version": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Version of the
granted license.</p>"
              }
            },
            "ReceivedMetadata": {
              "target": "com.amazonaws.licensemanager#ReceivedMetadata",
              "traits": {
                "smithy.api#documentation": "<p>Granted license received metadata.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
          }
        },
        "com.amazonaws.licensemanager#GrantedLicenseList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#GrantedLicense"
          }
        },
        "com.amazonaws.licensemanager#ISO8601DateTime": {
          "type": "string",
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[
0-3]|[0-1][0-9]):[0-5][0-9])+$"
          }
        },
        "com.amazonaws.licensemanager#Integer": {
          "type": "integer"
        },
        "com.amazonaws.licensemanager#InvalidParameterValueException": {
          "type": "structure",
          "members": {
```

```
            "Message": {
               "target": "com.amazonaws.licensemanager#Message"
            }
         },
         "traits": {
            "aws.protocols#awsQueryError": {
               "code": "InvalidParameterValueProvided",
               "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
         }
      },
      "com.amazonaws.licensemanager#InvalidResourceStateException":
{
         "type": "structure",
         "members": {
            "Message": {
               "target": "com.amazonaws.licensemanager#Message"
            }
         },
         "traits": {
            "aws.protocols#awsQueryError": {
               "code": "InvalidResourceState",
               "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n         <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
         }
      },
      "com.amazonaws.licensemanager#InventoryFilter": {
         "type": "structure",
         "members": {
            "Name": {
               "target": "com.amazonaws.licensemanager#String",

      "traits": {
                  "smithy.api#documentation": "<p>Name of the filter.</p>",
                  "smithy.api#required": {}
               }
            },
            "Condition": {
               "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
               "traits": {
```

```
            "smithy.api#documentation": "<p>Condition of the filter.</p>",
            "smithy.api#required": {}
          }
        },
        "Value": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Value of the filter.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
      }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
      "type": "enum",
       "members": {
        "EQUALS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EQUALS"
          }
        },
        "NOT_EQUALS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "NOT_EQUALS"
          }
        },
        "BEGINS_WITH": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "BEGINS_WITH"
          }
        },
        "CONTAINS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "CONTAINS"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#InventoryFilterList": {
      "type": "list",
```

```
  "member": {
            "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
    },
    "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>",
                    "smithy.api#required": {}
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage of sign and verify, \n         and support the RSASSA-PSS SHA-256 signing
algorithm.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details
 about the issuer of a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Issuer name.</p>"
                }
            },
            "SignKey": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage of sign and verify, \n         and support the RSASSA-PSS SHA-256 signing
algorithm.</p>"
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
```

```
                "smithy.api#documentation":
"<p>Issuer key fingerprint.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
          }
        },
        "com.amazonaws.licensemanager#License": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
              }
            },
            "LicenseName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>License name.</p>"
              }
            },
            "ProductName": {
              "target": "com.amazonaws.licensemanager#String",

      "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
              }
            },
            "ProductSKU": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
              }
            },
            "Issuer": {
              "target": "com.amazonaws.licensemanager#IssuerDetails",
              "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>"
              }
            },
            "HomeRegion": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Home Region of the license.</p>"
              }
```

```
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseStatus",
           "traits": {
             "smithy.api#documentation": "<p>License status.</p>"
          }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
             "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
          }
        },
        "Beneficiary": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
             "smithy.api#documentation": "<p>License beneficiary.</p>"
          }
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
          "traits": {
             "smithy.api#documentation": "<p>License entitlements.</p>"
          }
        },

      "ConsumptionConfiguration": {
          "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
          "traits": {
             "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
          }
        },
        "LicenseMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
             "smithy.api#documentation": "<p>License metadata.</p>"
          }
        },
        "CreateTime": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
             "smithy.api#documentation": "<p>License creation time.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
```

```
                "smithy.api#documentation":
"<p>License version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
                }
            },
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            },
            "Name": {

             "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>"
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Description of the license configuration.</p>"
                }
            },
            "LicenseCountingType": {
                "target": "com.amazonaws.licensemanager#LicenseCountingType",
                "traits": {
                    "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
                }
            },
            "LicenseRules": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation":
```

```
"<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
        },
        "ConsumedLicenses":
{
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the license configuration.</p>"
            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"
            }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
            "traits": {

    "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
            }
        },
```

```
        "ManagedResourceSummaryList": {
          "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
          }
        },
        "ProductInformationList": {
          "target": "com.amazonaws.licensemanager#ProductInformationList",
          "traits": {
            "smithy.api#documentation": "<p>Product information.</p>"
          }
        },
        "AutomatedDiscoveryInformation": {
          "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
          "traits": {
            "smithy.api#documentation": "<p>Automated discovery information.</p>"

       }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n        must be associated with a host), and the number of licenses purchased and used.</p>"
      }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"

     }
        },
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Type of server resource.</p>"
          }
        },
        "ResourceOwnerId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource
```

```
consuming licenses.</p>"
                }
            },
            "AssociationTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time when the license configuration was associated with the
resource.</p>"
                }
            },
            "AmiAssociationScope": {
                "target":
 "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members": {
            "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "AVAILABLE"
                }
            },

            "DISABLED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "DISABLED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
```

```
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Type of resource.</p>"
            }
          },
          "ResourceStatus": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Status of the resource.</p>"
            }
          },
          "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
            }
          },
          "AssociationTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
            }
          },
          "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
             }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license
configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
        "type": "list",
        "member": {
```

```
            "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
          }
        },
        "com.amazonaws.licensemanager#LicenseConfigurations": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfiguration"
          }
        },
        "com.amazonaws.licensemanager#LicenseConversionContext": {
          "type": "structure",
          "members": {
            "UsageOperation": {
              "target": "com.amazonaws.licensemanager#UsageOperation",
              "traits": {
                "smithy.api#documentation":
 "<p>The Usage operation value that corresponds to the license type you are converting your resource from.  For more information about which platforms correspond to which usage operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n        </p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
          }
        },
        "com.amazonaws.licensemanager#LicenseConversionTask": {
          "type": "structure",
          "members": {
            "LicenseConversionTaskId": {
              "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"

 }
            },
            "ResourceArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated with the license type\n        conversion task.</p>"
              }
            },
            "SourceLicenseContext": {
              "target": "com.amazonaws.licensemanager#LicenseConversionContext",
              "traits": {
                "smithy.api#documentation": "<p>Information about the license type this conversion task converted
```

```
from.</p>"
                }
            },
            "DestinationLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The status of the conversion task.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
                }
            },
            "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>The time the conversion task was started at.</p>"
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskId": {
        "type": "string",
```

```
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTaskStatus":
{
        "type": "enum",
        "members": {
            "IN_PROGRESS": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "IN_PROGRESS"
                }
            },
            "SUCCEEDED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "SUCCEEDED"
                }
            },
            "FAILED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "FAILED"
                }
            }
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTasks": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
    },
    "com.amazonaws.licensemanager#LicenseCountingType":
{
        "type": "enum",
        "members": {
            "VCPU": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "vCPU"
                }
            },
```

```
            "INSTANCE": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Instance"
              }
            },
            "CORE": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Core"
              }
            },
            "SOCKET": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Socket"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#LicenseDeletionStatus":
{
          "type": "enum",
          "members": {
            "PENDING_DELETE": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "PENDING_DELETE"
              }
            },
            "DELETED": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "DELETED"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#LicenseList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#License"
          }
        },
        "com.amazonaws.licensemanager#LicenseOperationFailure": {
          "type": "structure",
          "members": {
            "ResourceArn": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Resource type.</p>"
            }
          },
          "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Error message.</p>"
            }
          },
          "FailureTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Failure time.</p>"
            }
          },
          "OperationName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits":
{
              "smithy.api#documentation": "<p>Name of the operation.</p>"
            }
          },
          "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
            }
          },
          "OperationRequestedBy": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
            }
          },
          "MetadataList": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Reserved.</p>"
```

```
            }
          }

      },
        "traits": {
          "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseOperationFailureList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
        }
      },
      "com.amazonaws.licensemanager#LicenseSpecification": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "AmiAssociationScope": {
            "target": "com.amazonaws.licensemanager#String",
            "traits":
{
              "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseSpecifications": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseSpecification"
        }
      },
      "com.amazonaws.licensemanager#LicenseStatus": {
        "type": "enum",
        "members": {
          "AVAILABLE": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "AVAILABLE"
            }
          },
          "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",

        "traits": {
              "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
          },
          "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DEACTIVATED"
            }
          },
          "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "SUSPENDED"
            }
          },
          "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "EXPIRED"
            }
          },
          "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_DELETE"
            }
          },

        "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseUsage": {
        "type": "structure",
        "members": {
```

```
            "EntitlementUsages": {
                "target": "com.amazonaws.licensemanager#EntitlementUsageList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlement usages.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseUsageException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
             }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "LicenseUsageFailure",
                "httpResponseCode": 412
            },
            "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 412
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the specified license
configuration.</p>\n        <p>Resource associations need not consume licenses from a license configuration. \n
For example, an AMI or a stopped instance might not consume a license (depending
 on \n        the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {

            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationAssociations": {
```

```
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
            "traits": {
              "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }

      },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListDistributedGrants": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {

    "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
```

```
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
          "type": "structure",
          "members": {
            "GrantArns": {
              "target": "com.amazonaws.licensemanager#ArnList",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
               "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n
  <li>\n            <p>\n              <code>GranteePrincipalARN</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>LicenseIssuerName</code>\n            </p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                 "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
          "type": "structure",
          "members": {
            "Grants": {
              "target": "com.amazonaws.licensemanager#GrantList",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Distributed grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {

            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
    }
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
    "type": "structure",
    "members": {
```

```
      "LicenseConfigurationArn": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
          "smithy.api#required": {}

    }
      },
      "MaxResults": {
        "target": "com.amazonaws.licensemanager#BoxInteger",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse": {
    "type": "structure",
    "members": {
      "LicenseOperationFailureList": {
        "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",

   "traits": {
          "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConfigurations": {
    "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns":
{
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#Filters",
            "traits": {
              "smithy.api#documentation":
 "<p>Filters to scope the results. The following filters and logical operators\n       are supported:</p>\n       <ul>\n
      <li>\n            <p>\n            <code>licenseCountingType</code> - The dimension for which licenses are
counted.\n            Possible values are <code>vCPU</code> | <code>Instance</code> | <code>Core</code> |
<code>Socket</code>.</p>\n          </li>\n          <li>\n            <p>\n
<code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license enforcement is
used.</p>\n          </li>\n          <li>\n            <p>\n            <code>usagelimitExceeded</code> - A Boolean
value that indicates whether the available licenses have been exceeded.</p>\n          </li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse":
 {
        "type": "structure",
        "members": {
          "LicenseConfigurations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurations",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
```

```
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest":
{
        "type": "structure",
        "members": {
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#Filters",
            "traits": {
              "smithy.api#documentation": "<p>\n         Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
            }
```

```
    }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTasks": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest": {
          "type": "structure",
          "members": {
            "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n          <li>\n            <p>\n              <code>LicenseConfigurationArn</code>\n
            </p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
          "type": "structure",
```

```
      "members": {
        "ReportGenerators": {
          "target": "com.amazonaws.licensemanager#ReportGeneratorList",
           "traits": {
             "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license configurations.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
      }
    },
```

```
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
      "type": "structure",
      "members": {

      "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input":
 {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {
          "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
              "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
```

```
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersions": {
        "type": "operation",
        "input": {
            "target":
"com.amazonaws.licensemanager#ListLicenseVersionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
        }

},
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
```

```
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
      "type": "structure",
      "members": {
        "Licenses": {
          "target": "com.amazonaws.licensemanager#LicenseList",
          "traits": {
            "smithy.api#documentation": "<p>License details.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenses": {
      "type": "operation",
      "input": {

"target": "com.amazonaws.licensemanager#ListLicensesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListLicensesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
```

```
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {

          "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListLicensesRequest": {
          "type": "structure",
          "members": {
            "LicenseArns": {
              "target": "com.amazonaws.licensemanager#ArnList",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n
      </p>\n          </li>\n          <li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n
 </li>\n          <li>\n            <p>\n              <code>Status</code>\n            </p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
```

```
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicensesResponse":
{
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanager#ListReceivedGrantsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits":
{
            "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while
specifying the\n         recipient as this Amazon Web Services account, your organization, or an organizational unit\n
    (OU) to which this member account belongs.</p>"
         }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {

         "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
```

```
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
               "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
                "smithy.api#required": {}
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ParentArn</code>\n            </p>\n
    </li>\n          <li>\n            <p>\n              <code>GranteePrincipalArn</code>\n            </p>\n
</li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation":
 "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
          "type": "structure",
          "members": {
            "Grants": {
              "target": "com.amazonaws.licensemanager#GrantList",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
    "type": "structure",
    "members": {
        "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n
          <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
           <code>LicenseIssuerName</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>LicenseArn</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>GrantStatus</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>GranterAccountId</code>\n            </p>\n          </li>\n        </ul>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
```

```
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
        "type": "structure",
        "members": {
            "Grants": {
                "target": "com.amazonaws.licensemanager#GrantList",
                "traits": {
                    "smithy.api#documentation": "<p>Received grant details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },

"traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicenses": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
              },
              {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
              },
              {
                "target": "com.amazonaws.licensemanager#ValidationException"
              }
            ],
            "traits": {
              "smithy.api#documentation": "<p>Lists received licenses.</p>"
            }
          },
          "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization": {
            "type": "operation",
            "input": {
              "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
            },
            "output": {
              "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
            },
            "errors": [
              {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
              },

{
                "target": "com.amazonaws.licensemanager#AuthorizationException"
              },
              {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
              },
              {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
              },
              {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
              },
              {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
              },
              {
                "target": "com.amazonaws.licensemanager#ValidationException"
              }
            ],
            "traits": {
              "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
            }
```

```
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {

     "type": "structure",
       "members": {
          "Filters": {
             "target": "com.amazonaws.licensemanager#FilterList",
             "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n
</ul>"
             }
          },
          "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
             }
          },
          "MaxResults": {
             "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
             }
          }
       },
       "traits": {
          "smithy.api#input": {}
       }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
       "type": "structure",
       "members": {
          "Licenses": {
             "target": "com.amazonaws.licensemanager#GrantedLicenseList",
             "traits": {
                "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
             }
          },
          "NextToken": {
             "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
             }
          }
       },
       "traits": {
```

```
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
        "type": "structure",
        "members": {
            "LicenseArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>ProductSKU</code>\n                </p>\n
        </li>\n            <li>\n                <p>\n                    <code>Status</code>\n
    </p>\n            </li>\n            <li>\n                <p>\n                    <code>Fingerprint</code>\n                </p>\n
 </li>\n            <li>\n                <p>\n                    <code>IssuerName</code>\n                </p>\n            </li>\n
<li>\n                <p>\n                    <code>Beneficiary</code>\n                </p>\n            </li>\n        </ul>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }

            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#GrantedLicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>Received license details.</p>"
```

```
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventory": {
        "type": "operation",
        "input":
{
          "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#FailedDependencyException"
          },
          {
            "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"

    },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },

         "Filters": {
            "target": "com.amazonaws.licensemanager#InventoryFilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n       are supported:</p>\n       <ul>\n       <li>\n       <p>\n       <code>account_id</code>
- The ID of the Amazon Web Services account that owns the resource.\n       Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n       </li>\n       <li>\n       <p>\n
    <code>application_name</code> - The name of the application. \n       Logical operators are
<code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n       </li>\n       <li>\n       <p>\n
    <code>license_included</code> - The type of license included. \n       Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.\n
       Possible values are <code>sql-server-enterprise</code> | \n       <code>sql-server-standard</code> |
\n       <code>sql-server-web</code> |  \n       <code>windows-server-datacenter</code>.</p>\n
</li>\n       <li>\n       <p>\n       <code>platform</code> - The platform of the resource.\n
Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n       </li>\n
<li>\n       <p>\n       <code>resource_id</code> - The ID of the resource. \n       Logical operators
are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n       </li>\n       <li>\n       <p>\n
    <code>tag:<key></code> - The key/value combination of a tag assigned \n       to the resource. Logical
operators are <code>EQUALS</code> (single account) or\n       <code>EQUALS</code> |
<code>NOT_EQUALS</code> (cross account).</p>\n
    </li>\n       </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
        "type": "structure",
```

```
        "members": {
          "ResourceInventoryList": {
            "target": "com.amazonaws.licensemanager#ResourceInventoryList",
            "traits": {
              "smithy.api#documentation": "<p>Information about the resources.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTagsForResource":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {

      "smithy.api#documentation": "<p>Lists the tags for the specified resource. For more information about tagging
support in\n          License Manager, see the <a href=\"https://docs.aws.amazon.com/license-
```

```
manager/latest/APIReference/API_TagResource.html\">TagResource</a> operation.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members":
{
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>Information about the tags.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
```

```
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists your tokens.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListTokensRequest": {
          "type": "structure",
          "members": {
            "TokenIds": {
              "target": "com.amazonaws.licensemanager#StringList",
              "traits": {
                "smithy.api#documentation": "<p>Token IDs.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters
 to scope the results. The following filter is supported:</p>\n        <ul>\n          <li>\n            <p>\n
<code>LicenseArns</code>\n            </p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
```

```
    "com.amazonaws.licensemanager#ListTokensResponse": {
      "type":
"structure",
      "members": {
        "Tokens": {
          "target": "com.amazonaws.licensemanager#TokenList",
          "traits": {
            "smithy.api#documentation": "<p>Received token details.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
       },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
```

```
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n        consumption
 details by resource at a selected point in time. Use this action to audit the\n        current license consumption for any license inventory and configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },

       "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#Filters",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n        <li>\n        <p>\n        <code>resourceArn</code> - The ARN of the license configuration resource.</p>\n        </li>\n        <li>\n    <p>\n        <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | \n\t<code>EC2_HOST</code> | <code>EC2_AMI</code> | <code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>).</p>\n        </li>\n        <li>\n        <p>\n        <code>resourceAccount</code> - The ID of the account that owns the resource.</p>\n    </li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
```

```
    }
  },
  "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
    "type": "structure",
    "members": {
      "LicenseConfigurationUsageList": {
        "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
        "traits": {
          "smithy.api#documentation": "<p>Information about the license configurations.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"

       }
       }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#Location": {
    "type": "string"
  },
  "com.amazonaws.licensemanager#Long": {
    "type": "long"
  },
  "com.amazonaws.licensemanager#ManagedResourceSummary": {
    "type": "structure",
    "members": {
      "ResourceType": {
        "target": "com.amazonaws.licensemanager#ResourceType",
        "traits": {
          "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
        }
      },
      "AssociationCount": {
        "target": "com.amazonaws.licensemanager#BoxLong",
        "traits": {
          "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
        }

   }
    },
    "traits": {
      "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
```

```
    }
  },
  "com.amazonaws.licensemanager#ManagedResourceSummaryList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
    }
  },
  "com.amazonaws.licensemanager#MaxSize100": {
    "type": "integer",
    "traits": {
      "smithy.api#range": {
        "min": 1,
        "max": 100
      }
    }
  },
  "com.amazonaws.licensemanager#MaxSize3StringList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#String"
    },
    "traits": {
      "smithy.api#length": {
        "min": 0,
        "max": 3
      }
    }

},
  "com.amazonaws.licensemanager#Message": {
    "type": "string"
  },
  "com.amazonaws.licensemanager#Metadata": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>The key name.</p>"
        }
      },
      "Value": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>The value.</p>"
        }
      }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
        }
    },
    "com.amazonaws.licensemanager#MetadataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Metadata"
        }
    },
    "com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement
maximum count is reached.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#Options": {
        "type": "structure",
        "members": {
            "ActivationOverrideBehavior": {
                "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
                "traits": {
                    "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of
activating a grant.\n
        Activation options can only be used with granted licenses sourced from the Amazon Web Services
Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n
<code>Status</code> parameter.</p>\n            <ul>\n                <li>\n                    <p>As a license administrator, you can
optionally specify an\n                        <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n
</li>\n                <li>\n                    <p>As a grantor, you can optionally specify an\n
<code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n                        account in your
organization.</p>\n                </li>\n                <li>\n                    <p>As a grantee, if the grantor creating the distributed
grant doesnt specify an\n                        <code>ActivationOverrideBehavior</code>, you can optionally specify one
when you\n                        are activating the grant.</p>\n                </li>\n
    </ul>\n            <dl>\n                <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n                <dd>\n                    <p>Use this
value to activate a grant without replacing any member accounts\n                        active grants for the same
product.</p>\n                </dd>\n                <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n                <dd>\n
    <p>Use this value to activate a grant and disable other active grants in any\n                        member accounts for the
same product. This action will also replace their\n                        previously activated grants with this activated
grant.</p>\n                </dd>\n            </dl>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant,
such as activation\n        override behavior. For more information, see <a
href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted
 licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
      },
      "com.amazonaws.licensemanager#OrganizationConfiguration": {
        "type": "structure",
        "members": {
          "EnableIntegration": {
            "target": "com.amazonaws.licensemanager#Boolean",
            "traits": {
              "smithy.api#default": false,
              "smithy.api#documentation": "<p>Enables Organizations integration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
      },
      "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Arn"
        },
        "traits": {

      "smithy.api#length": {
            "min": 1,
            "max": 1
          }
        }
      },
      "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Resource type. The possible values are
<code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
              "smithy.api#required": {}
```

```
            }
          },
          "ProductInformationFilterList": {
            "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
            "traits": {
              "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code>
 which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies
the value to filter on. </p>\n        <p>Accepted values for <code>ProductInformationFilterName</code> are listed
here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. </p>\n
<p>The following filters and are supported when the resource type \n        is
<code>SSM_MANAGED</code>:</p>\n        <ul>\n        <li>\n        <p>\n        <code>Application
Name</code> - The name of the application.\n        Logical operator is <code>EQUALS</code>.</p>\n
</li>\n        <li>\n        <p>\n        <code>Application Publisher</code> - The publisher of the
application.\n        Logical operator is <code>EQUALS</code>.</p>\n        </li>\n        <li>\n
<p>\n        <code>Application Version</code> - The version of the
 application.\n        Logical operator is <code>EQUALS</code>.</p>\n        </li>\n        <li>\n
<p>\n        <code>Platform Name</code> - The name of the platform.\n        Logical operator is
<code>EQUALS</code>.</p>\n        </li>\n        <li>\n        <p>\n        <code>Platform
Type</code> - The platform type.\n        Logical operator is <code>EQUALS</code>.</p>\n        </li>\n
  <li>\n        <p>\n        <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services
resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>.  The
key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-
key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n
    </p>\n        </li>\n        <li>\n        <p>\n
        <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude
from automated discovery.\n        Logical operator is <code>NOT_EQUALS</code>.</p>\n        </li>\n
 <li>\n        <p>\n        <code>License Included</code> - The type of license included.\n        Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n        Possible values are:
<code>sql-server-enterprise</code> | \n        <code>sql-server-standard</code> | \n        <code>sql-server-
web</code> |  \n        <code>windows-server-datacenter</code>.</p>\n        </li>\n        </ul>\n
<p>The following filters and logical operators are supported when the resource type\n        is
<code>RDS</code>:</p>\n        <ul>\n        <li>\n        <p>\n        <code>Engine Edition</code> -
The edition of the database engine.\n        Logical operator is <code>EQUALS</code>.\n
        Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> |
<code>oracle-se2</code> \n        \t| <code>db2-se</code> | <code>db2-ae</code>.</p>\n        </li>\n
<li>\n        <p>\n        <code>License Pack</code> - The license pack.\n        Logical operator is
<code>EQUALS</code>.\n        Possible values are: <code>data guard</code> | \n        <code>diagnostic
pack sqlt</code> | \n        <code>tuning pack sqlt</code> | \n        <code>ols</code> | \n
<code>olap</code>.</p>\n        </li>\n        </ul>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#ProductInformationFilter":
{
        "type": "structure",
        "members": {
            "ProductInformationFilterName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Filter name.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductInformationFilterValue": {
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Filter value.</p>"
                }
            },
            "ProductInformationFilterComparator": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Logical operator.</p>",
                    "smithy.api#required": {}
                }
            }
        },
         "traits": {
            "smithy.api#documentation": "<p>Describes product information filters.</p>"
        }
    },
    "com.amazonaws.licensemanager#ProductInformationFilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ProductInformationFilter"
        }
    },
    "com.amazonaws.licensemanager#ProductInformationList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ProductInformation"
        }
    },
    "com.amazonaws.licensemanager#ProvisionalConfiguration": {
        "type": "structure",
        "members": {
            "MaxTimeToLiveInMinutes": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
```

```
                "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",

          "smithy.api#required": {}
                }
              }
            },
            "traits": {
              "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
            }
          },
          "com.amazonaws.licensemanager#RateLimitExceededException": {
            "type": "structure",
            "members": {
              "Message": {
                "target": "com.amazonaws.licensemanager#Message"
              }
            },
            "traits": {
              "aws.protocols#awsQueryError": {
                "code": "RateLimitExceeded",
                "httpResponseCode": 429
              },
              "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
              "smithy.api#error": "client",
              "smithy.api#httpError": 429
            }
          },
          "com.amazonaws.licensemanager#ReceivedMetadata": {
            "type": "structure",
            "members": {
              "ReceivedStatus": {
                "target": "com.amazonaws.licensemanager#ReceivedStatus",
                "traits": {
                  "smithy.api#documentation": "<p>Received status.</p>"
                }
              },
              "ReceivedStatusReason": {
                "target": "com.amazonaws.licensemanager#StatusReasonMessage",
                "traits": {
                  "smithy.api#documentation": "<p>Received status reason.</p>"
                }
              },
              "AllowedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                  "smithy.api#documentation": "<p>Allowed operations.</p>"
                }
```

```
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
      }
    },
    "com.amazonaws.licensemanager#ReceivedStatus": {
      "type": "enum",
      "members": {
        "PENDING_WORKFLOW": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "PENDING_WORKFLOW"
          }
        },
        "PENDING_ACCEPT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "PENDING_ACCEPT"
          }
        },
        "REJECTED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "REJECTED"
          }
        },
        "ACTIVE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "ACTIVE"
          }

},
        "FAILED_WORKFLOW": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "FAILED_WORKFLOW"
          }
        },
        "DELETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DELETED"
          }
        },
        "DISABLED": {
          "target": "smithy.api#Unit",
```

```
            "traits": {
                "smithy.api#enumValue": "DISABLED"
            }
        },
        "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
        }
    }
},
"com.amazonaws.licensemanager#RedirectException": {
    "type": "structure",

    "members": {
        "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
                "smithy.api#httpHeader": "Location"
            }
        },
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
    }
},
"com.amazonaws.licensemanager#RejectGrant": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#RejectGrantResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
```

```
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
      },
      "com.amazonaws.licensemanager#RejectGrantRequest":
{
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#RejectGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#RenewType": {
        "type": "enum",
        "members": {
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "None"
            }
          },
          "WEEKLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Weekly"
            }

      },
          "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Monthly"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ReportContext": {
        "type": "structure",
        "members": {
          "licenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that
this generator reports on.</p>",
              "smithy.api#required": {}
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
        }
      },
      "com.amazonaws.licensemanager#ReportFrequency": {

 "type": "structure",
        "members": {
          "value": {
            "target": "com.amazonaws.licensemanager#Integer",
            "traits": {
              "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated.  \n         The only supported value is <code>1</code>.</p>"
            }
          },
          "period": {
            "target": "com.amazonaws.licensemanager#ReportFrequencyType",
            "traits": {
              "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
or monthly.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
        }
      },
      "com.amazonaws.licensemanager#ReportFrequencyType": {
        "type": "enum",
        "members":
 {
          "DAY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DAY"
            }
          },
          "WEEK": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "WEEK"
            }
          },
          "MONTH": {
            "target": "smithy.api#Unit",
```

```
            "traits": {
                "smithy.api#enumValue": "MONTH"
            }
        }
    }
},
"com.amazonaws.licensemanager#ReportGenerator": {
    "type": "structure",
    "members": {
        "ReportGeneratorName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the report generator.</p>"

      }
        },
        "ReportType": {
            "target": "com.amazonaws.licensemanager#ReportTypeList",
            "traits": {
                "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
            }
        },
        "ReportContext": {
            "target": "com.amazonaws.licensemanager#ReportContext",
            "traits": {
                "smithy.api#documentation": "<p>License configuration type for this generator.</p>"
            }
        },
        "ReportFrequency": {
            "target": "com.amazonaws.licensemanager#ReportFrequency",
            "traits": {
                "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
            }
        },
        "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
            }
        },
        "LastRunStatus": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
            }
        },
        "LastRunFailureReason": {
            "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
            }
        },
        "LastReportGenerationTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Time
 the last report was generated at.</p>"
            }
        },
        "ReportCreatorAccount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
        },
        "S3Location": {
            "target": "com.amazonaws.licensemanager#S3Location",
            "traits": {
                "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
            }
        },

    "CreateTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Time the report was created.</p>"
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
                "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
    }
```

```
    },
    "com.amazonaws.licensemanager#ReportGeneratorList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ReportGenerator"
      }
    },
    "com.amazonaws.licensemanager#ReportGeneratorName": {
      "type": "string",

 "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        }
      }
    },
    "com.amazonaws.licensemanager#ReportType": {
      "type": "enum",
      "members": {
        "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
          }
        },
        "LICENSE_CONFIGURATION_USAGE_REPORT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "LicenseConfigurationUsageReport"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#ReportTypeList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ReportType"

}
    },
    "com.amazonaws.licensemanager#ResourceInventory": {
      "type": "structure",
      "members": {
        "ResourceId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>ID of the resource.</p>"
```

```
            }
        },
        "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
                "smithy.api#documentation": "<p>Type of resource.</p>"
            }
        },
        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
        },
        "Platform": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Platform of the resource.</p>"
            }
        },
        "PlatformVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
            }
        },
        "ResourceOwningAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a resource.</p>"
    }
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#ResourceInventory"
    }
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
```

```
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "ResourceLimitExceeded",
          "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#ResourceNotFoundException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
         }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "InvalidResource.NotFound",
          "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#ResourceType": {
      "type": "enum",
      "members": {
        "EC2_INSTANCE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EC2_INSTANCE"
          }
        },
        "EC2_HOST": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EC2_HOST"
          }
        },
        "EC2_AMI": {
           "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EC2_AMI"
```

```
            }
          },
          "RDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "RDS"
            }
          },
          "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#S3Location": {
        "type": "structure",
        "members": {
          "bucket": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the S3 bucket reports are published
to.</p>"
            }
          },
          "keyPrefix": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
        }
      },
      "com.amazonaws.licensemanager#ServerInternalException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "InternalError",
```

```
            "httpResponseCode": 500
          },
          "smithy.api#documentation":
"<p>The server experienced an internal error. Try again.</p>",
          "smithy.api#error": "server",
          "smithy.api#httpError": 500
        }
      },
      "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 4096
          }
        }
      },
      "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 400
          },
          "smithy.api#pattern": "^[\\s\\S]+$"
        }
      },
      "com.amazonaws.licensemanager#String": {
        "type": "string"
      },
      "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }

},
      "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
          "Key": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The tag key.</p>"
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The tag value.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details about the tags for a resource. For more information about tagging support in\n          License Manager, see the <a href=\"https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html\">TagResource</a> operation.</p>"
          }
        },
        "com.amazonaws.licensemanager#TagKeyList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#String"
          }
        },
        "com.amazonaws.licensemanager#TagList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#Tag"
          }
        },
        "com.amazonaws.licensemanager#TagResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#TagResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified resource. The following
resources support\n        tagging in License Manager:</p>\n        <ul>\n        <li>\n        <p>Licenses</p>\n
        </li>\n        <li>\n        <p>Grants</p>\n        </li>\n        <li>\n        <p>License
configurations</p>\n        </li>\n        <li>\n        <p>Report generators</p>\n        </li>\n        </ul>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource. The following
examples provide an example\n        ARN for each supported resource in License Manager:</p>\n        <ul>\n
<li>\n        <p>Licenses -\n        <code>arn:aws:license-manager::111122223333:license:l-
EXAMPLE2da7646d6861033667f20e895</code>\n        </p>\n        </li>\n        <li>\n        <p>Grants
-\n        <code>arn:aws:license-manager::111122223333:grant:g-
EXAMPLE7b19f4a0ab73679b0beb52707</code>\n        </p>\n        </li>\n        <li>\n
<p>License configurations -\n        <code>arn:aws:license-manager:us-east-1:111122223333:license-
configuration:lic-EXAMPLE6a788d4c8acd4264ff0ecf2ed2d</code>\n        </p>\n        </li>\n        <li>\n

        <p>Report generators -\n        <code>arn:aws:license-manager:us-east-1:111122223333:report-
generator:r-EXAMPLE825b4a4f8fe5a3e0c88824e5fc6</code>\n        </p>\n        </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
                "traits": {
                    "smithy.api#documentation": "<p>One or more tags.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#TokenData": {
```

```
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>"
                }
            },
            "TokenType": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
                }
            },
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
                }
            },
            "ExpirationTime": {
                "target": "com.amazonaws.licensemanager#ISO8601DateTime",
                "traits":
{
                    "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC format.</p>"
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Data specified by the caller.</p>"
                }
            },
            "RoleArns": {
                "target": "com.amazonaws.licensemanager#ArnList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
                }
            }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a token.</p>"
        }
    },
    "com.amazonaws.licensemanager#TokenList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#TokenData"
        }
    },
    "com.amazonaws.licensemanager#TokenString": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 4096
            },
            "smithy.api#pattern": "^\\S+$"
        }
    },
    "com.amazonaws.licensemanager#TokenType": {
        "type": "enum",
        "members": {
            "REFRESH_TOKEN": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REFRESH_TOKEN"
                }

            }
        }
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#UntagResource": {
```

```
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes the specified tags from the specified resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation":
"<p>Amazon Resource Name (ARN) of the resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanager#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
```

```
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#UntagResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
    }
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
    "type": "structure",
    "members": {
```

```
            "LicenseConfigurationArn": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                  "smithy.api#required": {}
               }
            },
            "LicenseConfigurationStatus": {
               "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
               "traits": {
                  "smithy.api#documentation": "<p>New status of the license configuration.</p>"

      }
            },
            "LicenseRules": {
               "target": "com.amazonaws.licensemanager#StringList",
               "traits": {
                  "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a
license\n         configuration is licenseAffinityToHost.</p>"
               }
            },
            "LicenseCount": {
               "target": "com.amazonaws.licensemanager#BoxLong",
               "traits": {
                  "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
               }
            },
            "LicenseCountHardLimit": {
               "target": "com.amazonaws.licensemanager#BoxBoolean",
               "traits": {
                  "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
               }
            },

            "Name": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>New name of the license configuration.</p>"
               }
            },
            "Description": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>New description of the license configuration.</p>"
               }
            },
```

```
        "ProductInformationList": {
          "target": "com.amazonaws.licensemanager#ProductInformationList",
          "traits": {
            "smithy.api#documentation": "<p>New product information.</p>"
          }
        },
        "DisassociateWhenNotFound": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {

     "smithy.api#documentation": "<p>When true, disassociates a resource when software is uninstalled.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"

        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
```

```
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates a report generator.</p>\n
      <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
      },
      "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
          "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
              "smithy.api#required": {}
            }
          },
          "ReportGeneratorName": {
            "target": "com.amazonaws.licensemanager#ReportGeneratorName",
            "traits": {
              "smithy.api#documentation": "<p>Name of the report generator.</p>",
              "smithy.api#required": {}
            }

      },
          "Type": {
            "target": "com.amazonaws.licensemanager#ReportTypeList",
            "traits": {
              "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n <ul>\n <li>\n <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n </li>\n <li>\n <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n </li>\n </ul>",
              "smithy.api#required": {}
            }
          },
```

```
            "ReportContext": {
              "target": "com.amazonaws.licensemanager#ReportContext",
              "traits": {
                "smithy.api#documentation": "<p>The report context.</p>",
                "smithy.api#required":
{}
              }
            },
            "ReportFrequency": {
              "target": "com.amazonaws.licensemanager#ReportFrequency",
              "traits": {
                "smithy.api#documentation": "<p>Frequency by which reports are generated.</p>",
                "smithy.api#required": {}
              }
            },
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientRequestToken",
              "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            },
            "Description": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Description of the report
generator.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
          },
          "output": {
```

```
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
Amazon Web Services resource.</p>\n         <p>You
 can update the license specifications of AMIs, instances, and hosts.\n         You cannot update the license
specifications for launch templates and CloudFormation templates, \n         as they send license configurations to the
operation that creates the resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
```

```
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
              "smithy.api#documentation":
"<p>ARNs of the license configurations to add.</p>"
            }
          },
          "RemoveLicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
              "smithy.api#documentation": "<p>ARNs of the license configurations to remove.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#UpdateServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
        },
        "output":
{
          "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
```

```
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
          }
        },
        "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {

      "type": "structure",
          "members": {
            "S3BucketArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where the License Manager information is stored.</p>"
              }
            },
            "SnsTopicArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used for License Manager alerts.</p>"
              }
            },
            "OrganizationConfiguration": {
              "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
              "traits": {
                "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
               }
            },
            "EnableCrossAccountsDiscovery": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
          "type": "structure",
          "members": {},
          "traits": {
            "smithy.api#output": {}
          }
```

```
    },
    "com.amazonaws.licensemanager#UsageOperation": {
      "type": "string",
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 50
        }
      }
    },
    "com.amazonaws.licensemanager#ValidationException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    }
  }
}
```


```
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
```

Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS

```
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
```

```
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err
 != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
```

```
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options);
err != nil {
 return err
}
if err = addCredentialSource(stack, options); err != nil {
 return err
}
if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
}
if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
 return err
```

```
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
```

```
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 //
 This member is required.
 ClientToken *string

 // Configuration for consumption of the license. Choose a provisional
 // configuration for workloads running with continuous connectivity. Choose a
 // borrow configuration for workloads with offline usage.
 //
 // This member is required.
 ConsumptionConfiguration *types.ConsumptionConfiguration

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.Entitlement
```

```
// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange

// Information about
the license.
LicenseMetadata []types.Metadata

// Tags to add to the license. For more information about tagging support in
// License Manager, see the [TagResource]operation.
//
// [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
Tags []types.Tag

noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

// Amazon Resource Name (ARN) of the license.
LicenseArn *string
```

```
// License status.
Status types.LicenseStatus

// License version.
Version *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
```

```
 return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
 return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err
 = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return
```

```
 err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
}
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
```

```
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 Retry
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
```

```
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {
```

```
// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
```

```
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
```

```
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
```

```
 ServiceID:     ServiceID,
 OperationName: "CheckoutBorrowLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },

    {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own
License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/DeregisterSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
```

```
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
             "traits": {
               "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
               "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of name to filter by.</p>"
             }
          },
          "Values": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
            }
          },
          "Operator": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
            "traits": {
              "smithy.api#documentation": "<p>An operator for filtering results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
      "type":
 "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
      },
      "output": {
        "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
         },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's
registered to your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/GetRegisteredSubscriptionProvider"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
```

```
                "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
          "type": "structure",
          "members": {
            "SubscriptionProviderArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration
resource specified in the request.</p>"
              }
            },
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

           "traits": {
                "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource
specified \n\t\t\tin the request.</p>"
              }
            },
            "SecretArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access
secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
              }
            },
            "SubscriptionProviderStatus": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
              "traits": {
                "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the
last \n\t\t\tsuccessful subscription data request.</p>"
               }
            },
            "SubscriptionProviderStatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The detailed message from your subscription provider token
status.</p>"
              }
```

```
            },
            "LastSuccessfulDataRetrievalTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved
subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
         "type": "operation",
         "input": {
            "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/subscription/GetServiceSettings"

          },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
         "type": "structure",
         "members": {}
      },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
      "type": "structure",
      "members": {
        "LinuxSubscriptionsDiscovery": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
          "traits": {
            "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
          }
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
          "traits": {
            "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has
been enabled, and which Regions data will be aggregated from.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being
applied.</p>"
          }
        },
        "StatusMessage": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
          "traits": {
            "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
          }
        },
        "HomeRegions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
           "traits": {
            "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
      "type": "structure",
      "members": {
        "AmiId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
          }
```

```
        },
        "InstanceID": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
          }
        },
        "InstanceType": {
          "target": "smithy.api#String",
          "traits":
{
            "smithy.api#documentation": "<p>The instance type of the resource.</p>"
          }
        },
        "AccountID": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of the instance.</p>"
          }
        },
        "Region": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
          }
        },
        "UsageOperation": {
          "target": "smithy.api#String",

   "traits": {
            "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
          }
        },
        "ProductCode": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
          "traits": {
            "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
```

```
            }
        },
        "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
        },
        "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
        },
        "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
            }
        },
        "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
        },
        "SubscriptionProviderUpdateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the registered \n\t\t\tthird-party Linux subscription provider.</p>"
            }
        },
        "DualSubscription": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for \n\t\t\tthe same software on your instance.</p>"
            }
        },
        "RegisteredWithSubscriptionProvider": {
            "target": "smithy.api#String",
            "traits": {
```

```
    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
"<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
        "operations": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
```

```
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager Linux Subscriptions",
          "arnNamespace": "license-manager-linux-subscriptions",
          "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-linux-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager,
you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager Linux Subscriptions",
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        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region": {
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
               "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
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                   "fn": "isSet",
                   "argv": [
                      {
                         "ref": "Endpoint"
                      }
                   ]
                 }
              ],
              "rules": [
                 {
                   "conditions": [
                      {
```

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                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
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        ],
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                "type": "error"
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                    "conditions": [
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                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]

}
                      ],
                      "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                      "type": "error"
                    },
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                      "conditions": [],
                      "endpoint": {
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                          "ref": "Endpoint"
                        },
                        "properties": {},
                        "headers": {}
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                      "type": "endpoint"
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                  "type": "tree"

            }
            ],
```

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    "conditions": [],
    "rules": [
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                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
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                    "conditions": [
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    "fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {

                                    "ref": "UseFIPS"
                                        },
                                        true
                                    ]
                                },
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                                    "fn": "booleanEquals",
                                    "argv": [
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                                            "ref": "UseDualStack"
```

```
                },
                true
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            }

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                        "argv": [
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                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"

            },
                                "supportsFIPS"
                            ]
                          }
                        ]
                      },
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          true,
                          {
                            "fn": "getAttr",
                            "argv": [

                             {
                                  "ref": "PartitionResult"
                              },
                              "supportsDualStack"
                            ]
                          }
                        ]
                      }
                    ],
                    "rules": [
                      {
                        "conditions": [],

    "rules": [
                          {
```

```
                                        "conditions": [],
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                                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
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                                        "type": "endpoint"
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                        "type": "tree"
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                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                            "type": "error"
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                    "type": "tree"
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                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "ref": "UseFIPS"
                                },
                                true
                            ]
                        }
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                    "rules": [
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                            "conditions": [
                                {

                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "fn": "getAttr",
                                            "argv": [
```

```
                                {
                                    "ref": "PartitionResult"
                                },
                                "supportsFIPS"
                            ]
                        },
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            "rules": [
                {
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                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {
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fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
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but this partition does not support FIPS",
            "type": "error"
        }
    ],
    "type": "tree"
},
{
    "conditions": [
        {
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            "argv": [
                {
                    "ref": "UseDualStack"
```

```
                    },
                    true

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            }
        ],
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            {
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                    {
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                        "argv": [
                            true,
                            {
                                "fn": "getAttr",
                                "argv": [
                                    {

                                    "ref": "PartitionResult"
                                    },
                                    "supportsDualStack"
                                ]
                            }
                        ]
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                ],
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                        "conditions": [],
                        "rules": [

    {
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                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                    "properties": {},
                                    "headers": {}
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                                "type": "endpoint"
                            }
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                        "type": "tree"

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                "type": "tree"
            },
```

```
                                    {
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                                        "type": "error"
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                                "type": "tree"
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                            "properties": {},
                                            "headers": {}
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                                        "type": "endpoint"
                                    }
                                ],
                                "type": "tree"
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                        "type": "tree"
                    }
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                "type": "tree"
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                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
        ],
        "type": "tree"
    }
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"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"
```

```
    }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": true
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": false
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      },
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    "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
        "expect": {
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            "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": true
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        "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
          }

  },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
```

```
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {

  "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
       },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
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        }
```

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      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
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    },
    {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
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        "endpoint": {
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        }
      },
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        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
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      "expect": {
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          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }

     },
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        "UseFIPS": true,
        "UseDualStack": false
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    },
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          "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
        }
      },
      "params": {
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        "UseFIPS": false,
        "UseDualStack": true
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"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
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                    }
                  },
                  "params": {
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                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
                  "expect": {
                    "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
                  },
                  "params": {

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                    "UseFIPS": true,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                    }
                  },
                  "params": {
                    "Region": "us-iso-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
                  "expect": {
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                  },
                  "params": {
                    "Region": "us-iso-east-1",
                    "UseFIPS": false,
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            "UseDualStack": true
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        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS":
false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
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          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
             }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-isob-east-1",
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            "UseFIPS": false,
            "UseDualStack": true
          }
        },
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          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }

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          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
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disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
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                "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                "expect": {
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                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {

"Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "Missing region",
                "expect": {
                  "error": "Invalid Configuration: Missing Region"
                }
              }
            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled LinuxSubscriptionsDiscovery"

       },
            {
              "name": "Disabled",
```

```
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
          "type": "structure",
          "members": {
            "SourceRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
              "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "OrganizationIntegration": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
              "traits": {
                "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

  {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>.</p>\n          <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto streamline results:</p>\n          <ul>\n            <li>\n              <p>\n                <code>AccountID</code>\n              </p>\n            </li>\n            <li>\n              <p>\n                <code>AmiID</code>\n              </p>\n            </li>\n            <li>\n              <p>\n <code>DualSubscription</code>\n              </p>\n            </li>\n            <li>\n              <p>\n <code>InstanceID</code>\n              </p>\n            </li>\n            <li>\n              <p>\n <code>InstanceType</code>\n              </p>\n            </li>\n            <li>\n              <p>\n <code>ProductCode</code>\n              </p>\n            </li>\n            <li>\n              <p>\n <code>Region</code>\n              </p>\n            </li>\n            <li>\n              <p>\n <code>Status</code>\n              </p>\n            </li>\n            <li>\n              <p>\n <code>UsageOperation</code>\n              </p>\n            </li>\n          </ul>\n          <p>For each filter, you can use one of the following <code>Operator</code>\n  values to \n  \t\tdefine the behavior of the filter:</p>\n          <ul>\n            <li>\n              <p>\n <code>contains</code>\n              </p>\n            </li>\n            <li>\n              <p>\n <code>equals</code>\n              </p>\n            </li>\n            <li>\n              <p>\n <code>Notequal</code>\n              </p>\n            </li>\n          </ul>"
                }
            },
            "MaxResults": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to
 start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
            }
          },
          "NextToken": {

         "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
        },
        "output": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",

    "items": "Subscriptions"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
          "type": "structure",
          "members": {
            "Filters": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n       <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't match a certain subscription's name.</p>\n        <p>The valid names for this filter are:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Subscription</code>\n            </p>\n          </li>\n        </ul>\n        <p>The
       valid Operators for this filter are:</p>\n        <ul>\n          <li>\n            <p>\n              <code>contains</code>\n            </p>\n          </li>\n          <li>\n            <p>\n              <code>equals</code>\n            </p>\n          </li>\n          <li>\n            <p>\n              <code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
```

```
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
        "type": "structure",
        "members": {
          "Subscriptions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
            "traits": {
              "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
             "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
        "type": "operation",
        "input": {
          "target":
```

```
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
        },
        "output": {
            "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration
resources for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "RegisteredSubscriptionProviders"
            }
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSources": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
                "traits": {
                    "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }

  },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
      "type": "structure",
      "members": {
        "RegisteredSubscriptionProviders": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
          "traits": {
            "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
          }
        },

         "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield
isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the
next request to retrieve \n\tadditional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
      "type": "operation",
      "input": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
          },
          "errors": [
            {

        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
            "smithy.api#http": {
              "method": "GET",
              "uri": "/tags/{resourceArn}"
            },
            "smithy.api#readonly": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
          "type": "structure",
          "members": {
            "resourceArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
               "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
          "type": "structure",
          "members": {
            "tags": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "EQUAL",
              "value": "Equal",
              "documentation": "Equal operator"
            },
            {
              "name": "NOT_EQUAL",
              "value": "NotEqual",
              "documentation": "Not equal operator"
            },
            {
              "name": "CONTAINS",
              "value": "Contains",
              "documentation": "Contains operator"
            }
          ],
          "smithy.api#length": {
            "min": 1,
            "max": 20
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled OrganizationIntegration"
            },
            {
              "name": "Disabled",
```

```
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
          "type": "list",
          "member": {
            "target": "smithy.api#String"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
           },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring
Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/RegisterSubscriptionProvider"

            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
          "type": "structure",
          "members": {
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
              "smithy.api#required": {}
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've
stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the
 Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription
provider \n\t\t\tresource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation":
 "<p>The Linux subscription provider that you registered.</p>"
            }
          },
          "SubscriptionProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
             "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider
access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions,
\n\t\t\tthis is the status of the offline token.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription
\n\t\t\tprovider token status.</p>"
            }
```

```
            },
            "LastSuccessfulDataRetrievalTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-\\.]{0,63}:secret:[^/]{1,1023}$"

   }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
         "type": "string",
         "traits": {
            "smithy.api#enum": [
               {
                  "name": "InProgress",
```

```
            "value": "InProgress",
            "documentation": "InProgress status"
          },
          {
            "name": "Completed",
            "value": "Completed",
            "documentation": "Completed status"
          },
          {
            "name": "Successful",
            "value": "Successful",
            "documentation": "Successful status"
          },
          {
            "name": "Failed",
            "value": "Failed",
            "documentation": "Failed status"
          }
        ]
      }
    },

    "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String",
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          }
        }
      },
      "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        },
        "smithy.api#uniqueItems": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
      "type": "map",
      "key": {
        "target": "smithy.api#String"
      },
      "value": {
        "target": "smithy.api#String"
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
          "Name":
{
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the subscription.</p>"
            }
          },
          "Type": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as OS licensing from Amazon EC2 or BYOS.</p>"
            }
          },
          "InstanceCount": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>The total amount of running instances using this subscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
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```
      "traits": {
        "smithy.api#enum": [

{
            "name": "RedHat",
            "value": "RedHat",
            "documentation": "RedHat subscription provider namespace"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "ACTIVE",
            "value": "ACTIVE",
            "documentation": "ACTIVE status"
          },
          {
            "name": "INVALID",
            "value": "INVALID",

 "documentation": "INVALID status"
          },
          {
            "name": "PENDING",
            "value": "PENDING",
            "documentation": "PENDING status"
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
```

```
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
 {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tags": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }

      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation":
"<p>The request was denied due to request throttling.</p>",
          "smithy.api#error": "client"
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
         "smithy.api#http": {
          "method": "DELETE",
          "uri": "/tags/{resourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "resourceArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
            "smithy.api#httpLabel": {},
            "smithy.api#required": {}
          }
        },
        "tagKeys": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
          "traits": {

       "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
            "smithy.api#httpQuery": "tagKeys",
            "smithy.api#required": {}
          }
```

```
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

 },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/UpdateServiceSettings"
        },
        "smithy.api#idempotent": {}
    }
},
"com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
    "type": "structure",
    "members": {
        "LinuxSubscriptionsDiscovery": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                "smithy.api#required": {}
            }
        },
        "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
            "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from.</p>",
                "smithy.api#required": {}
            }
        },
        "AllowUpdate": {
            "target":
 "smithy.api#Boolean",
            "traits": {
                "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region.</p>"
            }
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
      "type": "structure",
      "members": {
        "LinuxSubscriptionsDiscovery": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
          "traits": {
            "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
          }
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
           "traits": {
            "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
          }
```

```
            },
            "StatusMessage": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
               "traits": {
                  "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
               }

        },
            "HomeRegions": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
               "traits": {
                  "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
               }
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client"
         }
      }
   }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
```

```
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options)) (*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
```

```
struct {

// A structure containing data about the workspace.
//
// This member is required.
Workspace *types.WorkspaceDescription

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
```

```
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
```

```
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
```

```
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
 *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
```

```
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
```

ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": " You don't have sufficient access to perform this action. ",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",

```
            "traits": {
                "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
            }
        },
        "ActiveDirectorySettings":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
            "traits": {
                "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
            }
        },
        "ActiveDirectoryType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
            "traits": {
                "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
    "type": "structure",
    "members": {
        "DomainName": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
            }
        },
        "DomainIpv4List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
            "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                "smithy.api#length": {
                    "min": 1,
                    "max": 2
                }
            }
        },
        "DomainCredentialsProvider": {
            "target":
```

```
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that contains \n\t\t\tinformation about the credential provider for user administration.</p>"
                }
            },
            "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for \n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
{
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "SELF_MANAGED",
                    "value": "SELF_MANAGED",
                    "documentation": "SELF_MANAGED type of Active Directory"
                },
                {
                    "name": "AWS_MANAGED",
                    "value": "AWS_MANAGED",
                    "documentation": "AWS_MANAGED type of Active Directory"
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Arn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
        "type": "operation",
        "input": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based
subscriptions.</p>\n          <note>\n            <p>Your estimated bill for charges on the number of users and related
costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing
status) in Amazon Web Services Billing. For more information, see <a
href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly
charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n          </note>",
            "smithy.api#http":
 {
              "code": 200,
              "method": "POST",
              "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
          "type": "structure",
          "members": {
            "Username": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
              "smithy.api#required": {}
            }
          },
           "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The identity provider for the user.</p>",
              "smithy.api#required": {}
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
            }
          }
        },
        "traits": {

      "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
```

```
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
      },
      "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
           }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
          "smithy.api#error": "server"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },

        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                    "smithy.api#required": {}
                }
            },
            "LicenseServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
                }
            }
        },
        "traits": {
```

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            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
```

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        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
```

```
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
      "type": "structure",
      "members": {
        "LicenseServerEndpoint": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
          "traits": {
            "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
```

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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
                }
```

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            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}

      }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Directory": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
```

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                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
```

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            "InstanceUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
         "type": "structure",
         "members": {
            "InstanceUserSummary":
{
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
         "type": "structure",
         "members": {
            "Subnets": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
               "traits": {
                  "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
                  "smithy.api#length": {
                     "min": 1
                  },
```

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    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Attribute": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
                }
            },
            "Operation": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
                }
            },
            "Value": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>Value of the filter.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
        "type": "union",
        "members": {
            "ActiveDirectoryIdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
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            "traits": {
                "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
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                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
              }
            },
            "FailureMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes an identity provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
          "type": "list",
          "member": {

            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
          "type": "structure",
          "members": {
            "InstanceId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "Status": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                "smithy.api#required": {}
              }
            },
            "Products": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
               "traits": {
                "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                "smithy.api#required": {}
              }
            },
            "LastStatusCheckDate": {
              "target": "smithy.api#String",
```

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            "traits": {
                "smithy.api#documentation": "<p>The date of the last status check.</p>"
            }
        },
        "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
    "type": "structure",
    "members": {
        "Username": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                "smithy.api#required": {}
            }
        },
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                "smithy.api#required": {}
            }
        },

"IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                "smithy.api#required": {}
            }
```

```
            },
            "Status": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                  "smithy.api#required": {}
               }
            },
            "InstanceUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
                }
            },
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
               }
            },
            "AssociationDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
               }
            },
            "DisassociationDate": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
         "type": "list",
```

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    "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
    "type": "structure",
    "members": {
      "message": {
        "target": "smithy.api#String"
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
       "smithy.api#error": "server",
      "smithy.api#httpError": 500
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
    "type": "string",
    "traits": {
      "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
       },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
      },
```

```
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

      "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
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        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

          "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
{
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
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```
            "default": false,
            "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will
return an error.",
            "type": "Boolean"
          },
          "Endpoint": {
            "builtIn": "SDK::Endpoint",
            "required": false,
            "documentation": "Override the endpoint used to send this request",
            "type": "String"
          }
        },
        "rules": [
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            "conditions": [
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                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
             ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [
                  {

                    "fn": "booleanEquals",
                    "argv": [
                      {
```

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                        "ref": "UseDualStack"
                      },
                      true
                    ]
                  }
                ],
                "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },

"properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [
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                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Region"
                    }
                  ]
                }
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                {
                  "conditions": [
                    {
                      "fn": "aws.partition",

                      "argv": [
                        {
                          "ref": "Region"
                        }
                      ],
                      "assign": "PartitionResult"
                    }
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                ],
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                            {
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                                "argv": [
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                                        "ref": "UseFIPS"
                                    },
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true

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                                ]
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                                "argv": [
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                                    },
                                    true
                                ]
                            }
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                            {
                                "conditions": [
                                    {
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"fn": "booleanEquals",

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                                                "fn": "getAttr",
                                                "argv": [
                                                    {
                                                        "ref": "PartitionResult"
                                                    },
                                                    "supportsFIPS"
                                                ]
                                            }
                                        ]
                                    },
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                                        "fn": "booleanEquals",
                                        "argv": [
                                            true,
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```
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]
                                    }

                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }

    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [

 {
                            "ref": "UseFIPS"
                        },
                        true
                    ]
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                }
            ],
            "rules": [
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                    "conditions": [
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                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "fn": "getAttr",
                                    "argv": [

        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                },
                                true
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "endpoint": {

    "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                },
                {
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                    "error": "FIPS is enabled but this partition does not support FIPS",
                    "type": "error"

}
            ],
            "type": "tree"
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        {
            "conditions": [
                {
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                    "ref": "UseDualStack"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {

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                "conditions": [
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                    "fn": "booleanEquals",
                    "argv": [
                      true,
                      {
                        "fn": "getAttr",
                        "argv": [
                          {
                            "ref": "PartitionResult"
                          },
                          "supportsDualStack"
                        ]

         }
                      ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [],
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subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }

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                "type": "tree"
              },
              {
                "conditions": [],
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                                "type": "error"
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subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                            "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
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        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ]
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"smithy.rules#endpointTests": {
    "testCases": [
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect":
{
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
```

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                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",

      "UseFIPS": true,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint":
{
                  "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
                }
              },
              "params": {
                "Region": "cn-north-1",
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            "UseFIPS":
true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
             "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
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            "endpoint": {
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            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint":
{
              "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
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            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
             "UseDualStack": true
          }
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          "expect": {
            "endpoint": {
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            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
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```
            }
        },
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            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
                }
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": false

    }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
                "error": "DualStack is enabled but this partition does not support DualStack"
            },
            "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
                }

    },
            "params": {
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            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-isob-east-1",

  "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
```

```
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
      "expect": {

     "endpoint": {
            "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack":
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        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
```

```
                },
                {
                  "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                  "expect": {
                    "error": "Invalid Configuration:
 Dualstack and custom endpoint are not supported"
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "Missing region",
                  "expect": {
                    "error": "Invalid Configuration: Missing Region"
                  }
                }
              ],
              "version": "1.0"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
          "type": "structure",
          "members": {
            "ProvisioningStatus": {
              "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
               "traits": {
                 "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
              }
            },
            "HealthStatus": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
              "traits": {
                "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
              }
            },
            "Ipv4Address": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
              }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information
 about a Remote Desktop Services (RDS) license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>"
                }
            },
            "ServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

  "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
                }
            },
            "LicenseServerEndpointId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits":
```

```
{
                "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server.</p>"
              }
            },
            "LicenseServerEndpointProvisioningStatus": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
              "traits": {
                "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint</p>"
              }
            },
            "LicenseServers": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
              "traits": {
                "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
              }
            },

           "CreationTime": {
              "target": "smithy.api#Timestamp",
              "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server endpoint.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
          "type": "string"
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

      "type": "string",
          "traits": {
            "smithy.api#enum": [
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```
            {
              "name": "PROVISIONING",
              "value": "PROVISIONING",
              "documentation": ""
            },
            {
              "name": "PROVISIONING_FAILED",
              "value": "PROVISIONING_FAILED",
              "documentation": ""
            },
            {
              "name": "PROVISIONED",
              "value": "PROVISIONED",
              "documentation": ""
            },
            {
              "name": "DELETING",
              "value": "DELETING",
              "documentation": ""
            },
            {
              "name": "DELETION_FAILED",
              "value": "DELETION_FAILED",
              "documentation": ""

           },
            {
              "name": "DELETED",
              "value": "DELETED",
              "documentation": ""
            }
          ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "HEALTHY",
              "value": "HEALTHY",
              "documentation": ""
            },
            {
              "name": "UNHEALTHY",
              "value": "UNHEALTHY",
              "documentation": ""
            },
```

```
                {
                    "name": "NOT_APPLICABLE",
                    "value": "NOT_APPLICABLE",
                    "documentation": ""
                }
            ]
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>",
                    "smithy.api#required": {}
                }
            },
            "ServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
```

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                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {

            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
             },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "IdentityProviderSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
```

```
        "Filters": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>You can use
 the following filters to streamline results:</p>\n        <ul>\n        <li>\n        <p>Product</p>\n        </li>\n
      <li>\n        <p>DirectoryId</p>\n        </li>\n      </ul>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
 \n\tfrom a previously truncated response.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
      "type": "structure",
      "members": {
        "IdentityProviderSummaries": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

        "traits": {
            "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources
 that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
            "smithy.api#required": {}
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
 empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
 next request to retrieve additional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
      "type": "operation",
```

```
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },

{
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
      "smithy.api#http": {
        "code": 200,
        "method": "POST",
        "uri": "/instance/ListInstances"
      },
      "smithy.api#paginated": {
        "inputToken": "NextToken",
        "outputToken": "NextToken",
        "pageSize": "MaxResults",
        "items": "InstanceSummaries"
      }
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
    "type": "structure",
    "members":
```

```
{
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n               <p>Status</p>\n            </li>\n
         <li>\n               <p>InstanceId</p>\n            </li>\n         </ul>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
         "type": "structure",
         "members": {
            "InstanceSummaries": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
               "traits": {
                  "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next
 token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
               }
            }
         },
```

```
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
         },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/license-server/ListLicenseServerEndpoints"
        },

      "smithy.api#paginated": {
          "inputToken": "NextToken",
          "outputToken": "NextToken",
          "pageSize": "MaxResults",
          "items": "LicenseServerEndpoints"
        }
      }
```

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    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
      "type": "structure",
      "members": {
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
            "smithy.api#range": {
              "min": 1,
              "max": 100
            }
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n        <li>\n          <p>IdentityProviderArn</p>\n        </li>\n      </ul>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
      "type": "structure",
      "members": {
        "LicenseServerEndpoints": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
          "traits": {
            "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that
\n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
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empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type":
 "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
```

```
            },
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
              "items": "ProductUserSummaries"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
{
          "type": "structure",
          "members": {
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n          </p>"
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n              <p>Status</p>\n            </li>\n            <li>\n              <p>Username</p>\n
</li>\n            <li>\n              <p>Domain</p>\n            </li>\n          </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating.
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This is the nextToken \n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service
 hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target":
```

```
 "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
              "method": "GET",
              "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                "smithy.api#httpLabel": {},
                "smithy.api#required": {}

           }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
          "type": "structure",
          "members": {
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
```

```
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListUserAssociations"
        },
        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceUserSummaries"
        }
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
    "type": "structure",
    "members": {
        "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The ID of the EC2 instance, which
 provides user-based subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
              "traits": {

      "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n        <ul>\n
   <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n          </li>\n
<li>\n            <p>Domain</p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
 \n\tfrom a previously truncated response.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummaries": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
```

```
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username":
{
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for this product
user.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
           "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of a product for this user.</p>",
              "smithy.api#required": {}
            }
          },
```

```
            "ProductUserArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
              }
            },
            "StatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {

            "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
              }
            },
            "SubscriptionStartDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The start date of a subscription.</p>"
              }
            },
            "SubscriptionEndDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The end date of a subscription.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific user.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
          "type":
 "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
          "type": "structure",
          "members": {
```

```
            "RdsSalCredentialsProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider":
 {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target":
 "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
```

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            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
          "type": "structure",
          "members": {
            "IdentityProvider": {

       "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
                "smithy.api#required": {}
              }
            },
            "Settings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
              "traits":
 {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation":
 "<p>Metadata that describes the results of an identity provider operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",

     "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
              "smithy.api#length": {
```

```
                    "min": 1
                }
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
    "type": "string",
    "traits": {
        "smithy.api#length": {

     "min": 5,
            "max": 200
        },
        "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
    "type": "structure",
    "members": {
        "Endpoint": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>A network endpoint through which you can access one or more servers.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
    "type": "union",
    "members": {
        "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
            "traits": {
                "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {

  "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
              "smithy.api#length": {
                "min": 1
              },
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

           "traits": {
              "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688
communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
              "smithy.api#required": {}
            }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
```

```
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/user/StartProductSubscription"
            }

      }
       },
       "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
          "type": "structure",
          "members": {
             "Username": {
                "target": "smithy.api#String",
                "traits": {
                   "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
                   "smithy.api#required": {}
                }
             },
             "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                   "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                   "smithy.api#required": {}
                }
             },
             "Product": {
                "target": "smithy.api#String",
                "traits": {

  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n         <p>Valid values:
<code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n
</p>",
                   "smithy.api#required": {}
                }
             },
             "Domain": {
                "target": "smithy.api#String",
                "traits": {
                   "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
                }
             },
             "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                   "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
                }
```

```
  }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

    },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

    },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/StopProductSubscription"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
                }
            },
            "IdentityProvider": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "ProductUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"
```

```
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user for whom to stop the product \n\t\t\tsubscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
              "smithy.api#required": {}
            }

    }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {

 "min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation":
 "<p>Adds tags to a resource.</p>",
        "smithy.api#http": {
          "method": "PUT",
          "uri": "/tags/{ResourceArn}"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation":
 "<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
 {
        "type": "structure",
        "members": {
```

```
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {

             "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
```

```
        }
          },
          "TagKeys": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
              "smithy.api#httpQuery": "tagKeys",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
          "smithy.api#http": {
```

```
      "code": 200,
            "method": "POST",
            "uri": "/identity-provider/UpdateIdentityProviderSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },

          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
            }
          },
          "UpdateSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
            "traits": {
              "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n          <li>\n            <p>Subnets which you want to add to provision VPC endpoints.</p>\n          </li>\n
      <li>\n            <p>Subnets which you want to remove the VPC endpoints from.</p>\n          </li>\n
<li>\n            <p>Security
 group ID which permits traffic to the VPC endpoints.</p>\n          </li>\n        </ul>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
      "type": "structure",
      "members": {
        "IdentityProviderSummary": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
          "traits": {
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
      "type": "structure",
      "members": {
        "AddSubnets": {

       "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
            "smithy.api#required": {}
          }
        },
        "RemoveSubnets": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
          "traits": {
            "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
            "smithy.api#required": {}
          }
        },
        "SecurityGroupId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
          "traits": {
            "smithy.api#documentation": "<p>A security group ID that
 allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for
activation servers.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
```

```
            "type": "structure",
            "members": {
                "message": {
                    "target": "smithy.api#String"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>A parameter is not valid.</p>",
                "smithy.api#error": "client"
            }
        }
    }
}
ListReceivedLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
```

ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }
```

```
 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
```

```
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
if
err = addCredentialSource(stack, options); err != nil {
 return err
}
```

```
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckInLicense",
 }
}
CheckoutLicense
 Initialize stack step
  spanInitializeStart
```

RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.129 x-net 0.40.0

1.129.1 Available under license :

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1.130 x-sys 0.33.0

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1.131 aws-sdk-go-v2-service-dynamodb 1.43.1

1.131.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {
```

```
 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
   - Fingerprint
 //
 //   - IssuerName
 //
 //   - Beneficiary
 Filters []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

 // Received license details.
 Licenses []types.GrantedLicense

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
```

```
    # ScanCode
    - name: Self-configure scancode
      working-directory: ./scancode-toolkit
      run: ./scancode --help
    - name: Run Scan code on target
      run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
    - name: Run Scan code on pr ref
      run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt
    # compare
    - name: License test
      run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi
DeleteLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
```

ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
ListLicenses
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming

```
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}
```

```
type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
```

```
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
```

```
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
```

```
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
```

```
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
```

```
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
```

```
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {
```

```
 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
 //   - Fingerprint
 //
 //   - Status
 Filters
 []types.Filter

 // Amazon Resource Names (ARNs) of the licenses.
 LicenseArns []string

 // Maximum number of results to return in a single call.
 MaxResults *int32

 // Token for the next set of results.
 NextToken *string

 noSmithyDocumentSerde
}

type ListLicensesOutput struct {

 // License details.
 Licenses []types.License

 // Token for the next set of results.
 NextToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
```

```
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
```

```
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
  }
 }
DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
```

```
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",
        "namespace": "*"
      },
      {
        "id": "HttpResponseCodeSemantics",
        "namespace": "*"
      },
      {
        "id": "PaginatedTrait",
        "namespace": "*"
      },
      {
        "id": "HttpHeaderTrait",
        "namespace": "*"
      },
      {
        "id": "HttpUriConflict",
        "namespace": "*"
      },
      {
        "id": "Service",
        "namespace": "*"
      }
    ]
  },
  "shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
      "type": "service",
      "version": "2018-08-01",
      "operations": [
        {
          "target": "com.amazonaws.licensemanager#AcceptGrant"
        },

 {
          "target": "com.amazonaws.licensemanager#CheckInLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
        },
        {
          "target": "com.amazonaws.licensemanager#CheckoutLicense"
        },
```

```
    {
      "target": "com.amazonaws.licensemanager#CreateGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateGrantVersion"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateToken"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
```

```
},
{
   "target": "com.amazonaws.licensemanager#GetLicense"
},
{
   "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
},
{
   "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
   "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
   "target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
   "target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
   "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
 },
{
   "target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
   "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenses"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

  "target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
```

```
            "target": "com.amazonaws.licensemanager#ListReceivedGrants"
        },
        {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
        },
        {
            "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
        },
        {
            "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
        },
        {
            "target": "com.amazonaws.licensemanager#ListResourceInventory"
        },
        {
            "target": "com.amazonaws.licensemanager#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanager#ListTokens"
        },
        {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
         },
        {
            "target": "com.amazonaws.licensemanager#RejectGrant"
        },
        {
            "target": "com.amazonaws.licensemanager#TagResource"
        },
        {
            "target": "com.amazonaws.licensemanager#UntagResource"
        },
        {
            "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
        },
        {
            "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
        },
        {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
        },
        {
            "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
        }
    ],
    "traits": {
        "aws.api#service": {
```

```
            "sdkId": "License Manager",
            "arnNamespace": "license-manager",
            "cloudFormationName": "LicenseManager",
            "cloudTrailEventSource": "license-manager.amazonaws.com",
            "endpointPrefix": "license-manager"
        },
        "aws.auth#sigv4": {
            "name": "license-manager"
        },
        "aws.protocols#awsJson1_1": {},
        "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software vendors across multiple \n         Amazon Web Services accounts and on-premises servers.</p>",
        "smithy.api#title": "AWS License Manager",
        "smithy.api#xmlNamespace": {
            "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
        },
        "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
                "Region": {
                    "builtIn": "AWS::Region",
                    "required": false,
                    "documentation": "The AWS region used to dispatch the request.",
                    "type": "String"
                },
                "UseDualStack": {
                    "builtIn": "AWS::UseDualStack",
                    "required": true,
                    "default": false,
                    "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                    "type": "Boolean"
                },
                "UseFIPS": {
                    "builtIn": "AWS::UseFIPS",
                    "required": true,
                    "default": false,
                    "documentation": "When true,
 send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                    "type": "Boolean"
                },
                "Endpoint": {
                    "builtIn": "SDK::Endpoint",
                    "required": false,
                    "documentation": "Override the endpoint used to send this request",
                    "type": "String"
                }
```

```
},
"rules": [
  {
    "conditions": [
      {
        "fn": "isSet",
        "argv": [
          {
            "ref": "Endpoint"
          }
        ]

      }
    ],
    "rules": [
      {
        "conditions": [
          {
            "fn": "booleanEquals",
            "argv": [
              {
                "ref": "UseFIPS"
              },
              true
            ]
          }
        ],
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
        "type": "error"
      },
      {
        "conditions": [

    {
            "fn": "booleanEquals",
            "argv": [
              {
                "ref": "UseDualStack"
              },
              true
            ]
          }
        ],
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
        "type": "error"
      },
      {
        "conditions": [],
```

```
                "endpoint": {
                  "url": {
                    "ref": "Endpoint"
                  },
                   "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ],
            "type": "tree"
          },
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {

"fn": "aws.partition",
                    "argv": [
                      {
                        "ref": "Region"
                      }
                    ],
                    "assign": "PartitionResult"
                  }
                ],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseFIPS"
                          },
```

```
                true
                    ]
                },
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

                "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsFIPS"
                                    ]
                                }
                            ]

        },
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        true,
                                        {
                                            "fn": "getAttr",
                                            "argv": [
                                                {
                                                    "ref": "PartitionResult"
                                                },
                                                "supportsDualStack"
                                            ]

    }
                                ]
```

```
                }
            ],
            "rules": [
                {
                    "conditions": [],
                    "endpoint": {
                        "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                        "properties": {},
                        "headers": {}
                    },
                    "type": "endpoint"
                }

        ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
            "type": "error"
        }
    ],
    "type": "tree"
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [

    {
                    "ref": "UseFIPS"
                },
                true
            ]
        }
    ],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "fn": "getAttr",
                            "argv": [
```

```
                {
                                "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                        ]
                    },
                    true
                ]
            }
        ],
        "rules": [
            {
                "conditions": [],
                "endpoint": {

"url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [],
        "error": "FIPS is enabled but this partition does not support FIPS",
        "type": "error"
    }

  ],
   "type": "tree"
},
{
   "conditions": [
      {
         "fn": "booleanEquals",
         "argv": [
            {
               "ref": "UseDualStack"
            },
            true
         ]
      }
   ],
   "rules": [
      {
```

```
    "conditions": [
                                        {
                                          "fn": "booleanEquals",
                                          "argv": [
                                            true,
                                            {
                                              "fn": "getAttr",
                                              "argv": [
                                                {
                                                  "ref": "PartitionResult"
                                                },
                                                "supportsDualStack"
                                              ]

    }
                                          ]
                                        }
                                      ],
                                      "rules": [
                                        {
                                          "conditions": [],
                                          "endpoint": {
                                            "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                          },
                                          "type": "endpoint"
                                        }

          ],
                                      "type": "tree"
                                    },
                                    {
                                      "conditions": [],
                                      "error": "DualStack is enabled but this partition does not support DualStack",
                                      "type": "error"
                                    }
                                  ],
                                  "type": "tree"
                                },
                                {
                                  "conditions": [],
                                  "endpoint": {
                                    "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
```

```
                        "headers": {}
                      },
                      "type": "endpoint"
                    }
                  ],
                  "type": "tree"
                }
              ],
              "type": "tree"
            },
            {
              "conditions": [],
              "error": "Invalid Configuration: Missing Region",
              "type": "error"
            }
          ]
        },
        "smithy.rules#endpointTests": {
          "testCases": [
            {
              "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint":
{
                  "url": "https://license-manager.af-south-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "af-south-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager.ap-east-1.amazonaws.com"
                }
              },
              "params": {
                "Region": "ap-east-1",
                "UseFIPS": false,
                "UseDualStack": false
               }
            },
            {
              "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
```

```
      "expect": {
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      "params": {
        "Region": "ap-northeast-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
      "expect": {
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          "url": "https://license-manager.ap-northeast-2.amazonaws.com"
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      "params": {
        "Region": "ap-northeast-2",
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        "UseDualStack": false
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      "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
      "expect": {
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          "url": "https://license-manager.ap-northeast-3.amazonaws.com"
        }
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      "params": {
        "Region": "ap-northeast-3",
        "UseFIPS": false,
        "UseDualStack": false
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    {
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        }
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      "params": {
        "Region": "ap-south-1",
        "UseFIPS": false,
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            "UseDualStack": false
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          "expect": {
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              "url": "https://license-manager.ap-southeast-1.amazonaws.com"

}
          },
          "params": {
            "Region": "ap-southeast-1",
            "UseFIPS": false,
            "UseDualStack": false
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          "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-2.amazonaws.com"
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          "params": {
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            "UseFIPS": false,
            "UseDualStack": false
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"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-3.amazonaws.com"
            }
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          "params": {
            "Region": "ap-southeast-3",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
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                "url": "https://license-manager.ca-central-1.amazonaws.com"
              }
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            "params": {
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              "UseFIPS": false,
              "UseDualStack": false
            }
          },
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            "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
            "expect": {
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                "url": "https://license-manager.eu-central-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "eu-central-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region eu-north-1 with
FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.eu-north-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "eu-north-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.eu-south-1.amazonaws.com"
              }
            },
            "params": {
              "Region":
"eu-south-1",
              "UseFIPS": false,
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            "UseDualStack": false
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            "endpoint": {
              "url": "https://license-manager.eu-west-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
          "expect": {

           "endpoint": {
              "url": "https://license-manager.eu-west-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-west-3.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-3",
            "UseFIPS": false,

    "UseDualStack": false
          }
        },
        {
          "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
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            "url": "https://license-manager.me-south-1.amazonaws.com"
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        "params": {
          "Region": "me-south-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
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        "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.sa-east-1.amazonaws.com"
           }
        },
        "params": {
          "Region": "sa-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
      },
      {
        "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.us-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": false,
          "UseDualStack": false
        }

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      {
        "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-east-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-east-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
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    },
    {
      "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-east-2.amazonaws.com"
        }

      },
      "params": {
        "Region": "us-east-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-east-2.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-2",
        "UseFIPS": true,
        "UseDualStack": false
      }
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    {
      "documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-west-1.amazonaws.com"
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      "params": {
        "Region": "us-west-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
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      "expect": {
        "endpoint": {
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        }
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      "params": {

    "Region": "us-west-1",
        "UseFIPS": true,
        "UseDualStack": false
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      "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
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        "UseFIPS": false,
        "UseDualStack": false
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        "Region": "us-west-2",
        "UseFIPS": true,
        "UseDualStack": false
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      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-east-1.api.aws"
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      },
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        "UseFIPS": true,
         "UseDualStack": true
      }
    },
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                    }
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                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                  }
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                  "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
                    }
                  },
                  "params": {
                    "Region": "cn-north-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
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                  "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
                    }
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                  "params": {
                    "Region": "cn-northwest-1",
                    "UseFIPS": false,
                    "UseDualStack": false

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                  "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
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                    }
                  },
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        "UseDualStack": true
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        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
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        }
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      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
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      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-east-1.amazonaws.com"
        }
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      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
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      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
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      "expect": {
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        },
        "params": {
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          "UseFIPS": true,
          "UseDualStack": false
        }
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        "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager.us-gov-west-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-west-1",
          "UseFIPS": false,
          "UseDualStack": false
        }
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        "documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
        "expect": {
          "endpoint": {
            "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
          }
        },
        "params": {
          "Region": "us-gov-west-1",
          "UseFIPS": true,
          "UseDualStack": false
        }
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        "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
        "expect": {
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                    "UseDualStack": true
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                    }
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                    "UseFIPS": false,
                    "UseDualStack": true
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                {
                  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
                    }
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                  "params": {
                    "Region": "us-iso-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
                  "expect": {
                    "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
                  },
                  "params": {
                    "Region": "us-iso-east-1",
                    "UseFIPS": true,
                     "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
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                "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
              }
            },
            "params": {
              "Region": "us-iso-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "error": "DualStack is enabled
but this partition does not support DualStack"
            },
            "params": {
              "Region": "us-iso-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
              }
            },
            "params": {
              "Region": "us-isob-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },

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            "expect": {
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            },
            "params": {
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              "UseDualStack": true
            }
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          {
            "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
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        }
      },

    "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

  "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
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        "UseDualStack": false,
                    "Endpoint": "https://example.com"
                }
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            {
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                "expect": {
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
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                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                    "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                }
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            {
                "documentation": "Missing region",
                "expect": {
                    "error": "Invalid Configuration: Missing Region"
                }
            }
        ],
        "version": "1.0"
      }
    }
  },
  "com.amazonaws.licensemanager#AcceptGrant": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

},
    "output": {
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        "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"

}
      ],
      "traits": {
        "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
      }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
      "type": "structure",
      "members": {
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            "GrantArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Grant
ARN.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanager#GrantStatus",
              "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
              }
            },
            "Version": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Grant version.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#AccessDeniedException": {
          "type": "structure",
          "members": {
            "Message": {
              "target": "com.amazonaws.licensemanager#Message"
            }
          },
          "traits": {
            "aws.protocols#awsQueryError": {

  "code": "ServiceAccessDenied",
              "httpResponseCode": 401
            },
            "smithy.api#documentation": "<p>Access to resource denied.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 401
          }
        },
        "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
          "type": "enum",
          "members": {
            "DISTRIBUTED_GRANTS_ONLY": {
              "target": "smithy.api#Unit",
              "traits": {
```

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                "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
              }
            },
            "ALL_GRANTS_PERMITTED_BY_ISSUER": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#AllowedOperation": {

        "type": "enum",
          "members": {
            "CREATE_GRANT": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "CreateGrant"
              }
            },
            "CHECKOUT_LICENSE": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "CheckoutLicense"
              }
            },
            "CHECKOUT_BORROW_LICENSE": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "CheckoutBorrowLicense"
              }
            },
            "CHECK_IN_LICENSE": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "CheckInLicense"
              }
            },
            "EXTEND_CONSUMPTION_LICENSE":
{
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "ExtendConsumptionLicense"
              }
            },
            "LIST_PURCHASED_LICENSES": {
              "target": "smithy.api#Unit",
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            "traits": {
                "smithy.api#enumValue": "ListPurchasedLicenses"
            }
        },
        "CREATE_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "CreateToken"
            }
        }
    }
},
"com.amazonaws.licensemanager#AllowedOperationList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#AllowedOperation"
    },
    "traits": {
        "smithy.api#length": {
            "min": 1,
            "max":
8
        }
    }
},
"com.amazonaws.licensemanager#Arn": {
    "type": "string",
    "traits": {
        "smithy.api#length": {
            "min": 0,
            "max": 2048
        },
        "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
    }
},
"com.amazonaws.licensemanager#ArnList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Arn"
    }
},
"com.amazonaws.licensemanager#AuthorizationException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
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        },
        "traits": {
          "aws.protocols#awsQueryError":
{
            "code": "AuthorizationFailure",
            "httpResponseCode": 403
          },
          "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n        policy associated with this account.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 403
        }
      },
      "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
          "LastRunTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
      },

    "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
          "smithy.api#default": false
        }
      },
      "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
          "AllowEarlyCheckIn": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
```

```
                "smithy.api#required": {}
            }
        }

},
    "traits": {
        "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
    }
},
"com.amazonaws.licensemanager#BoxBoolean": {
    "type": "boolean"
},
"com.amazonaws.licensemanager#BoxInteger": {
    "type": "integer"
},
"com.amazonaws.licensemanager#BoxLong": {
    "type": "long"
},
"com.amazonaws.licensemanager#CheckInLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"

  },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
```

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            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
```

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        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {

"target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
        "type": "structure",
        "members":
{
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
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use the borrow consumption configuration. ",
"smithy.api#required": {}
}
},
"Entitlements": {
"target": "com.amazonaws.licensemanager#EntitlementDataList",
"traits": {
"smithy.api#documentation": " License entitlements. Partial checkouts are not supported. ",
"smithy.api#required": {}
}
},
"DigitalSignatureMethod": {
"target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
"traits": {
"smithy.api#documentation": " Digital signature method. The possible
value is JSON Web Signature (JWS) algorithm PS384.\n For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS. ",
"smithy.api#required": {}
}
},
"NodeId": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Node ID. "
}
},
"CheckoutMetadata": {
"target": "com.amazonaws.licensemanager#MetadataList",
"traits": {
"smithy.api#documentation": " Information about constraints. "
}
},
"ClientToken": {
"target": "com.amazonaws.licensemanager#ClientToken",
"traits": {
"smithy.api#documentation":
" Unique, case-sensitive identifier that you provide to ensure the idempotency of the request. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
"type": "structure",
"members": {

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        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
          }
        },
        "LicenseConsumptionToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License consumption token.</p>"
          }
        },
        "EntitlementsAllowed":
{
          "target": "com.amazonaws.licensemanager#EntitlementDataList",
          "traits": {
            "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
          }
        },
        "NodeId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Node ID.</p>"
          }
        },
        "SignedToken": {
          "target": "com.amazonaws.licensemanager#SignedToken",
          "traits": {
            "smithy.api#documentation": "<p>Signed token.</p>"
          }
        },
        "IssuedAt": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
          }
        },
        "Expiration": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
            "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
          }
        },
        "CheckoutMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",
          "traits": {
            "smithy.api#documentation": "<p>Information about constraints.</p>"
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            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutLicense": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target":
"com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
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        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n        <p>If the account that created the license is the same that is performing the check out, you must\n        specify the account as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
            "ProductSKU": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Product SKU.</p>",
                    "smithy.api#required": {}
                }
            },
            "CheckoutType": {
                "target": "com.amazonaws.licensemanager#CheckoutType",
                "traits": {
                    "smithy.api#documentation": "<p>Checkout type.</p>",
                    "smithy.api#required": {}
                }
            },
            "KeyFingerprint": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementDataList",
                "traits": {
                    "smithy.api#documentation": "<p>License entitlements.</p>",

    "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
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            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
            }
        }
    },
    "traits": {

    "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CheckoutLicenseResponse": {
    "type": "structure",
    "members": {
        "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
                "smithy.api#documentation": "<p>Checkout type.</p>"
            }
        },
        "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License consumption token.</p>"
            }
        },
        "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
        },
         "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
            }
        },
        "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
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            }
          },
          "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
          },
          "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
            }
          },
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutType": {
        "type": "enum",
        "members": {
          "PROVISIONAL": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PROVISIONAL"
            }
          },
          "PERPETUAL": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PERPETUAL"
            }
           }
        }
      },
      "com.amazonaws.licensemanager#ClientRequestToken": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 1,
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            "max": 36
          }
        }
      },
      "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 2048
          },
          "smithy.api#pattern": "^\\S+$"
        }
      },
      "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "ConflictException",
            "httpResponseCode":
409
          },
          "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 409
        }
      },
      "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
            }
          },
          "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
            }
          }
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        },

    "traits": {
            "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
        }
    },
    "com.amazonaws.licensemanager#ConsumptionConfiguration": {
        "type": "structure",
        "members": {
            "RenewType": {
                "target": "com.amazonaws.licensemanager#RenewType",
                "traits": {
                    "smithy.api#documentation": "<p>Renewal frequency.</p>"
                }
            },
            "ProvisionalConfiguration": {
                "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
                 }
            },
            "BorrowConfiguration": {
                "target": "com.amazonaws.licensemanager#BorrowConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
        },
        "errors": [
            {
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```
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target":
 "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of
 license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n
 organizational unit (OU). For more
  information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-
 licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateGrantRequest": {
        "type": "structure",
        "members": {
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
 idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantName": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant name.</p>",
                    "smithy.api#required": {}
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    }
        },
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Principals": {
          "target": "com.amazonaws.licensemanager#PrincipalArnList",
          "traits": {
            "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an Amazon Resource Name\n (ARN):</p>\n <ul>\n <li>\n <p>An Amazon Web Services account, which includes only the account specified.</p>\n </li>\n </ul>\n <ul>\n <li>\n <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n </li>\n </ul>\n <ul>\n
      <li>\n <p>An organization, which will include all accounts across your organization.</p>\n </li>\n </ul>",
            "smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the grant.</p>",
            "smithy.api#required": {}
          }
        },
        "AllowedOperations": {
          "target": "com.amazonaws.licensemanager#AllowedOperationList",
          "traits": {
            "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
            "smithy.api#required": {}
          }
        },
        "Tags": {
          "target": "com.amazonaws.licensemanager#TagList",

       "traits": {
            "smithy.api#documentation": "<p>Tags to add to the grant. For more information about tagging support in\n License Manager, see the <a href=\"https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html\">TagResource</a> operation.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
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        }
      },
      "com.amazonaws.licensemanager#CreateGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation":
"<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersion": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
           },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
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            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"

        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          },
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          },
          "GrantName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

        "smithy.api#documentation": "<p>Grant name.</p>"
            }
          },
          "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
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            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },

       {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Creates a license.</p>"
    }
},
"com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {
```

```
"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }

        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n            <p>A license configuration is an abstraction of a customer license agreement that can be\n            consumed and enforced by License Manager. Components include specifications for the license\n            type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n            Dedicated Instance, Dedicated Host, or all of these), license affinity  to host (how long a \n            license must be associated with a host), and the number of licenses purchased and used.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                     "smithy.api#required": {}
                }
            },
            "Description": {
                "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"

  }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n          <li>\n            <p>\n              <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
          <code>licenseAffinityToHost</code> |\n            <code>maximumCores</code> |
<code>minimumCores</code>\n
          </p>\n          </li>\n          <li>\n            <p>\n              <code>Instances</code> dimension:
<code>allowedTenancy</code> | \n            <code>maximumVcpus</code> | <code>minimumVcpus</code>\n
      </p>\n          </li>\n          <li>\n            <p>\n              <code>Sockets</code> dimension:
<code>allowedTenancy</code> | \n            <code>licenseAffinityToHost</code> |\n
<code>maximumSockets</code> | <code>minimumSockets</code>\n            </p>\n          </li>\n          <li>\n
        <p>\n              <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n            <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n            </p>\n          </li>\n        </ul>\n        <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code>
 are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n        <code>EC2-
DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"
            }
        },
```

```
            "Tags": {
              "target": "com.amazonaws.licensemanager#TagList",
              "traits": {
                "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
              }
            },
            "DisassociateWhenNotFound": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
              }
            },
            "ProductInformationList": {
              "target": "com.amazonaws.licensemanager#ProductInformationList",
               "traits": {
                "smithy.api#documentation": "<p>Product information.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
          "type": "structure",
          "members": {
            "LicenseConfigurationArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
           },
          "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
          },
          "errors": [
            {
```

```
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],

    "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n         For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert
 a license type using the CLI </a> in the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
```

For the structure of the destination license, see Convert a license type using the CLI in the License Manager User Guide. ",
"smithy.api#required": {}
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
"type": "structure",
"members": {
"LicenseConversionTaskId": {
"target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
"traits": {
"smithy.api#documentation": " The ID of the created license type conversion task. "
}
}
},
"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
},
"output": {
"target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
},
"errors":
[
{
"target": "com.amazonaws.licensemanager#AccessDeniedException"
},
{
"target": "com.amazonaws.licensemanager#AuthorizationException"
},
{
"target": "com.amazonaws.licensemanager#InvalidParameterValueException"
},
{
"target": "com.amazonaws.licensemanager#RateLimitExceededException"
},
{

```
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }

    ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "ReportGeneratorName": {
                "target": "com.amazonaws.licensemanager#ReportGeneratorName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the report generator.</p>",
                    "smithy.api#required": {}
                }
            },
            "Type": {
                "target": "com.amazonaws.licensemanager#ReportTypeList",
                "traits": {
                    "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be
generated:</p>\n        <ul>\n            <li>\n                <p>License configuration report - Reports the number and
details
 of consumed licenses for a license configuration.</p>\n            </li>\n            <li>\n                <p>Resource report -
Reports the tracked licenses and resource consumption for a license configuration.</p>\n            </li>\n        </ul>",
                    "smithy.api#required": {}
                }
            },
            "ReportContext": {
                "target": "com.amazonaws.licensemanager#ReportContext",
                "traits": {
                    "smithy.api#documentation": "<p>Defines the type of license configuration the report generator
tracks.</p>",
                    "smithy.api#required": {}
                }
            },
            "ReportFrequency": {
                "target": "com.amazonaws.licensemanager#ReportFrequency",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Frequency by which reports are generated.  Reports can be generated daily, monthly, or
 weekly.</p>",
              "smithy.api#required": {}
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientRequestToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"

            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
          "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report generator.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
```

```
    "com.amazonaws.licensemanager#CreateLicenseRequest": {
      "type": "structure",
      "members": {
        "LicenseName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation":
"<p>License name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product name.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductSKU": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product SKU.</p>",
            "smithy.api#required": {}
          }
        },
        "Issuer": {
          "target": "com.amazonaws.licensemanager#Issuer",
          "traits": {
            "smithy.api#documentation": "<p>License issuer.</p>",
            "smithy.api#required": {}

  }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region for the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
            "smithy.api#required": {}
          }
        },
```

```
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
          "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>",
            "smithy.api#required": {}

    }
        },
        "Beneficiary": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License beneficiary.</p>",
            "smithy.api#required": {}
          }
        },
        "ConsumptionConfiguration": {
          "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseMetadata": {
          "target": "com.amazonaws.licensemanager#MetadataList",

   "traits": {
            "smithy.api#documentation": "<p>Information about the license.</p>"
          }
        },
        "ClientToken": {
          "target": "com.amazonaws.licensemanager#ClientToken",
          "traits": {
            "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
            "smithy.api#required": {}
          }
        },
        "Tags": {
          "target": "com.amazonaws.licensemanager#TagList",
          "traits": {
            "smithy.api#documentation": "<p>Tags to add to the license. For more information about tagging support in\n License Manager, see the <a href=\"https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html\">TagResource</a> operation.</p>"
          }
        }
```

```
 },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseResponse": {
    "type": "structure",
    "members": {
        "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License version.</p>"
            }
        }

    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicenseVersion": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
```

```
            "target": "com.amazonaws.licensemanager#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required":
{}
            }
          },
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product name.</p>",
              "smithy.api#required": {}
            }
          },
          "Issuer": {
```

```
            "target": "com.amazonaws.licensemanager#Issuer",
            "traits": {
              "smithy.api#documentation": "<p>License issuer.</p>",
              "smithy.api#required": {}
            }
          },
          "HomeRegion": {

 "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Home Region of the license.</p>",
              "smithy.api#required": {}
            }
          },
          "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
              "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license.</p>"
            }
          },
          "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
             "traits": {
              "smithy.api#documentation": "<p>License entitlements.</p>",
              "smithy.api#required": {}
            }
          },
          "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n         running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n         usage.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>",
```

```
  "smithy.api#required": {}
                }
            },
            "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                    "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {

    "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New version of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
```

```
        }
    },
    "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"

            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n            <p>A refresh token is a JWT token used to get an access token. With an access token,\n            you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n            call License Manager to manage the specified license.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateTokenRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is
mapped to the aud claim of the\n          JWT token.</p>",
              "smithy.api#required":
{}
            }
          },
          "RoleArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the
token. \n          License Manager does not check whether the roles are in use.</p>"
            }
          },
          "ExpirationInDays": {
            "target": "com.amazonaws.licensemanager#Integer",
            "traits": {
              "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The
default is 365 days.</p>"
            }
          },
          "TokenProperties": {
            "target": "com.amazonaws.licensemanager#MaxSize3StringList",
            "traits": {
              "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT
token. The data is mapped\n          to the amr claim of the JWT token.</p>"
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
        "members": {
          "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token ID.</p>"
            }
```

```
        },
        "TokenType": {
          "target": "com.amazonaws.licensemanager#TokenType",
           "traits": {
             "smithy.api#documentation": "<p>Token type.</p>"
          }
        },
        "Token": {
          "target": "com.amazonaws.licensemanager#TokenString",
          "traits": {
             "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#DateTime": {
      "type": "timestamp"
    },
    "com.amazonaws.licensemanager#DatetimeRange": {
      "type": "structure",
      "members": {
        "Begin": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
             "smithy.api#documentation": "<p>Start of the time range.</p>",
             "smithy.api#required":
{}
          }
        },
        "End": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
             "smithy.api#documentation": "<p>End of the time range.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
      }
    },
    "com.amazonaws.licensemanager#DeleteGrant": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
      },
```

```
    "output": {
      "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
       },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Deletes the specified grant.</p>"
    }
  },
  "com.amazonaws.licensemanager#DeleteGrantRequest": {
    "type": "structure",
    "members": {
      "GrantArn": {

   "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
          "smithy.api#required": {}
        }
      },
      "StatusReason": {
        "target": "com.amazonaws.licensemanager#StatusReasonMessage",
        "traits": {
          "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
        }
      },
      "Version": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the grant.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteGrantResponse":
{
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicense":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
```

```
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Deletes the specified license.</p>"
    }
},
"com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
```

```
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n        <p>You cannot delete a license configuration that is in use.</p>"
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the license configuration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
```

```
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n          <p>This action deletes
 the report generator, which stops it from generating future reports.\n          The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
          "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
```

```
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#DeleteLicenseRequest": {
    "type": "structure",
    "members": {
      "LicenseArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
          "smithy.api#required": {}
        }
      },
      "SourceVersion": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Current version of the license.</p>",
          "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#DeleteLicenseResponse": {

   "type": "structure",
    "members": {
      "Status": {
        "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
        "traits": {
          "smithy.api#documentation": "<p>License status.</p>"
        }
      },
      "DeletionDate": {
        "target": "com.amazonaws.licensemanager#ISO8601DateTime",
        "traits": {
          "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#DeleteToken": {
```

```
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token.
Must be called in the license home Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DigitalSignatureMethod": {
        "type": "enum",
        "members": {
          "JWT_PS384": {
            "target": "smithy.api#Unit",

           "traits": {
              "smithy.api#enumValue": "JWT_PS384"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#Entitlement": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement name.</p>",
              "smithy.api#required": {}
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement resource. Use only if the unit is None.</p>"
            }
          },
          "MaxCount": {
            "target": "com.amazonaws.licensemanager#Long",
            "traits": {
              "smithy.api#documentation":
"<p>Maximum entitlement count. Use if the unit is not None.</p>"
            }
          },
          "Overage": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
```

```
            }
          },
          "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementUnit",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement unit.</p>",
              "smithy.api#required": {}
            }
          },
          "AllowCheckIn": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
            }
          }

      },
      "traits": {
        "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
      }
    },
    "com.amazonaws.licensemanager#EntitlementData": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Entitlement data name.</p>",
            "smithy.api#required": {}
          }
        },
        "Value": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Entitlement data value.</p>"
          }
        },
        "Unit": {
          "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
          "traits": {

    "smithy.api#documentation": "<p>Entitlement data unit.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanager#EntitlementDataList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#EntitlementData"
        }
      },
      "com.amazonaws.licensemanager#EntitlementDataUnit": {
        "type": "enum",
        "members": {
          "COUNT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Count"
            }
          },
          "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue":
"None"
            }
          },
          "SECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Seconds"
            }
          },
          "MICROSECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Microseconds"
            }
          },
          "MILLISECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Milliseconds"
            }
          },
          "BYTES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Bytes"
            }
          },
```

```
        "KILOBYTES": {
          "target": "smithy.api#Unit",

"traits": {
            "smithy.api#enumValue": "Kilobytes"
          }
        },
        "MEGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabytes"
          }
        },
        "GIGABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes"
          }
        },
        "TERABYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabytes"
          }
        },
        "BITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bits"
          }
        },
        "KILOBITS": {

    "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobits"
          }
        },
        "MEGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabits"
          }
        },
        "GIGABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits"
```

```
            }
          },
          "TERABITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Terabits"
            }
          },
          "PERCENT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Percent"
            }

        },
          "BYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Bytes/Second"
            }
          },
          "KILOBYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Kilobytes/Second"
            }
          },
          "MEGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Megabytes/Second"
            }
          },
          "GIGABYTES_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Gigabytes/Second"
            }
          },
          "TERABYTES_PER_SECOND": {
            "target":
"smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Terabytes/Second"
            }
          },
          "BITS_PER_SECOND": {
            "target": "smithy.api#Unit",
```

```
            "traits": {
              "smithy.api#enumValue": "Bits/Second"
            }
          },
          "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Kilobits/Second"
            }
          },
          "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Megabits/Second"
            }
          },
          "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue":
"Gigabits/Second"
            }
          },
          "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Terabits/Second"
            }
          },
          "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Count/Second"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#EntitlementList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Entitlement"
        }
      },
      "com.amazonaws.licensemanager#EntitlementNotAllowedException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
```

```
        }

    },
      "traits": {
        "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#EntitlementUnit": {
      "type": "enum",
      "members": {
        "COUNT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Count"
          }
        },
        "NONE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "None"
          }
        },
        "SECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Seconds"
          }
        },
        "MICROSECONDS": {

          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Microseconds"
          }
        },
        "MILLISECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Milliseconds"
          }
        },
        "BYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bytes"
          }
```

```
      },
      "KILOBYTES": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Kilobytes"
        }
      },
      "MEGABYTES": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Megabytes"

    }
      },
      "GIGABYTES": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Gigabytes"
        }
      },
      "TERABYTES": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Terabytes"
        }
      },
      "BITS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Bits"
        }
      },
      "KILOBITS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Kilobits"
        }
      },
      "MEGABITS": {
        "target": "smithy.api#Unit",
        "traits": {

  "smithy.api#enumValue": "Megabits"
        }
      },
      "GIGABITS": {
        "target": "smithy.api#Unit",
        "traits": {
```

```
            "smithy.api#enumValue": "Gigabits"
          }
        },
        "TERABITS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits"
          }
        },
        "PERCENT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Percent"
          }
        },
        "BYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bytes/Second"
          }
        },
        "KILOBYTES_PER_SECOND": {
          "target":
"smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Kilobytes/Second"
          }
        },
        "MEGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabytes/Second"
          }
        },
        "GIGABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabytes/Second"
          }
        },
        "TERABYTES_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabytes/Second"
          }
        },
        "BITS_PER_SECOND": {
          "target": "smithy.api#Unit",
```

```
            "traits": {

"smithy.api#enumValue": "Bits/Second"
            }
          },
          "KILOBITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Kilobits/Second"
            }
          },
          "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Megabits/Second"
            }
          },
          "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Gigabits/Second"
            }
          },
          "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Terabits/Second"
            }
          },

          "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Count/Second"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#EntitlementUsage": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement usage name.</p>",
              "smithy.api#required": {}
            }
          },
```

```
            "ConsumedValue": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Resource usage consumed.</p>",
                "smithy.api#required": {}
              }
            },
            "MaxCount":
{
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
              }
            },
            "Unit": {
              "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
              "traits": {
                "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
          }
        },
        "com.amazonaws.licensemanager#EntitlementUsageList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#EntitlementUsage"
          }
        },
        "com.amazonaws.licensemanager#ExtendLicenseConsumption":
{
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "DryRun": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,

              "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License consumption token.</p>"
            }
          },
          "Expiration": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the
license consumption expires.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#FailedDependencyException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          },
          "ErrorCode": {
            "target": "com.amazonaws.licensemanager#String"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "FailedDependency",
            "httpResponseCode": 424
          },
          "smithy.api#documentation": "<p>A dependency required to run the API is missing.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 424
        }
      },
      "com.amazonaws.licensemanager#Filter":
{
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#FilterName",
            "traits": {
              "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
            }
          },
          "Values": {
```

```
            "target": "com.amazonaws.licensemanager#FilterValues",
            "traits": {
              "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only specify one value for the filter.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a\n          describe operation. Filters can be used to match a set of resources by specific criteria,\n          such as tags, attributes, or IDs.</p>"

        }
      },
      "com.amazonaws.licensemanager#FilterLimitExceededException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
          },
          "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },
      "com.amazonaws.licensemanager#FilterList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Filter"
        }
      },
      "com.amazonaws.licensemanager#FilterName": {
        "type": "string"
      },
      "com.amazonaws.licensemanager#FilterValue":
{
        "type": "string"
      },
      "com.amazonaws.licensemanager#FilterValues": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#FilterValue",
```

```
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#Filters": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Filter",
            "traits": {
                "smithy.api#xmlName": "item"
            }
        }
    },
    "com.amazonaws.licensemanager#GetAccessToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
        },

  "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access tokens\n          are valid for one hour.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenRequest": {
        "type": "structure",
        "members": {
```

```
            "Token":
{
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {
                    "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                    "smithy.api#required": {}
                }
            },
            "TokenProperties": {
                "target": "com.amazonaws.licensemanager#MaxSize3StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT
token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse": {
        "type": "structure",
        "members": {
            "AccessToken": {
                "target": "com.amazonaws.licensemanager#TokenString",
                "traits": {

             "smithy.api#documentation": "<p>Temporary access token.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetGrant": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetGrantRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetGrantResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
```

```
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
        }
      },
      "com.amazonaws.licensemanager#GetGrantRequest": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetGrantResponse": {
        "type": "structure",
        "members": {
          "Grant": {
            "target": "com.amazonaws.licensemanager#Grant",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Grant details.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicense": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetLicenseRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#GetLicenseResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Gets detailed
information about the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConfiguration": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
        },
        "output": {
```

```
            "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
             }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationId":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
```

```
            }
        },
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        },
        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation":
"<p>Description of the license configuration.</p>"
            }
        },
        "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
                "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
            }
        },
        "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>License rules.</p>"
            }
        },
        "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
                "smithy.api#documentation": "<p>Number of available licenses.</p>"
            }
        },
        "LicenseCountHardLimit": {

 "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
            }
        },
        "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License configuration status.</p>"
            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the owner
of the license configuration.</p>"
            }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
            }
        },
        "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
                "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
            }
        },
        "ProductInformationList":
{
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
                "smithy.api#documentation": "<p>Product information.</p>"
            }
        },
        "AutomatedDiscoveryInformation": {
            "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
            "traits": {
                "smithy.api#documentation": "<p>Automated discovery information.</p>"
            }
        },
```

```
            "DisassociateWhenNotFound": {
               "target": "com.amazonaws.licensemanager#BoxBoolean",
               "traits": {
                  "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTask":
{
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
         ],
          "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
         }
      },
      "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
         "type": "structure",
         "members": {
            "LicenseConversionTaskId": {
               "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
               "traits": {
```

```
                "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information on.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
          "type": "structure",
          "members": {
            "LicenseConversionTaskId": {
              "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
               "traits": {
                "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
              }
            },
            "ResourceArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license conversion task is associated with.</p>"
              }
            },
            "SourceLicenseContext": {
              "target": "com.amazonaws.licensemanager#LicenseConversionContext",
              "traits": {
                "smithy.api#documentation": "<p>Information about the license type converted from.</p>"
              }
            },
            "DestinationLicenseContext": {
              "target": "com.amazonaws.licensemanager#LicenseConversionContext",
               "traits": {
                "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
              }
            },
            "StatusMessage": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
              }
            },
            "Status": {
              "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
              "traits": {
                "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
```

```
            }
          },
          "StartTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task
 was started .</p>"
            }
          },
          "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
            }
          },
          "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"

    },
        "output": {
          "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse":
{
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
```

```
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Version": {
          "target":
"com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseResponse": {
      "type": "structure",
      "members": {
        "License": {
          "target": "com.amazonaws.licensemanager#License",
          "traits": {
            "smithy.api#documentation": "<p>License details.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetLicenseUsage": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
      },
      "output":
{
        "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
      },
      "errors": [
        {
```

```
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified
license.</p>"
        }
      },
      "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
        "type": "structure",
        "members": {
          "LicenseUsage": {
            "target": "com.amazonaws.licensemanager#LicenseUsage",
            "traits": {
              "smithy.api#documentation": "<p>License usage details.</p>"
            }
          }
        },
```

```
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
"<p>Gets the License Manager settings for the current Region.</p>"
        }
      },
      "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
          "S3BucketArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n        and so on.</p>"
            }
          },
```

```
            "SnsTopicArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>SNS topic configured
 to receive notifications from License Manager.</p>"
              }
            },
            "OrganizationConfiguration": {
              "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
              "traits": {
                "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
 Manager for\n         cross-account discovery.</p>"
              }
            },
            "EnableCrossAccountsDiscovery": {
              "target": "com.amazonaws.licensemanager#BoxBoolean",
              "traits": {
                "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
              }
            },
            "LicenseManagerResourceShareArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon
 Resource Name (ARN) of the resource share. The License Manager management account \n         provides member
 accounts with access to this share.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#Grant": {
          "type": "structure",
          "members": {
            "GrantArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                "smithy.api#required": {}
              }
            },
            "GrantName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Grant name.</p>",
                "smithy.api#required": {}
```

```
}
        },
        "ParentArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Parent ARN.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>License ARN.</p>",
            "smithy.api#required": {}
          }
        },
        "GranteePrincipalArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The grantee principal ARN.</p>",
            "smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
           "traits": {
            "smithy.api#documentation": "<p>Home Region of the grant.</p>",
            "smithy.api#required": {}
          }
        },
        "GrantStatus": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>",
            "smithy.api#required": {}
          }
        },
        "StatusReason": {
          "target": "com.amazonaws.licensemanager#StatusReasonMessage",
          "traits": {
            "smithy.api#documentation": "<p>Grant status reason.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation":
```

```
"<p>Grant version.</p>",
                    "smithy.api#required": {}
                }
            },
            "GrantedOperations": {
                "target": "com.amazonaws.licensemanager#AllowedOperationList",
                "traits": {
                    "smithy.api#documentation": "<p>Granted operations.</p>",
                    "smithy.api#required": {}
                }
            },
            "Options": {
                "target": "com.amazonaws.licensemanager#Options",
                "traits": {
                    "smithy.api#documentation": "<p>The options specified for the grant.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes a grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#GrantList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Grant"
        }
    },
    "com.amazonaws.licensemanager#GrantStatus": {
        "type": "enum",
        "members": {
            "PENDING_WORKFLOW": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_WORKFLOW"
                }
            },
            "PENDING_ACCEPT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "PENDING_ACCEPT"
                }
            },
            "REJECTED": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "REJECTED"
                }
```

```
            },
            "ACTIVE": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "ACTIVE"
               }
             },
            "FAILED_WORKFLOW": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "FAILED_WORKFLOW"
               }
            },
            "DELETED": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "DELETED"
               }
            },
            "PENDING_DELETE": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "PENDING_DELETE"
               }
            },
            "DISABLED": {
               "target": "smithy.api#Unit",
               "traits": {
                  "smithy.api#enumValue": "DISABLED"
               }
            },
            "WORKFLOW_COMPLETED": {
               "target": "smithy.api#Unit",
               "traits":
{
                  "smithy.api#enumValue": "WORKFLOW_COMPLETED"
               }
            }
         }
      },
      "com.amazonaws.licensemanager#GrantedLicense": {
         "type": "structure",
         "members": {
            "LicenseArn": {
               "target": "com.amazonaws.licensemanager#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
               }
```

```
        },
        "LicenseName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License name.</p>"
          }
        },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product name.</p>"

      }
        },
        "ProductSKU": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product SKU.</p>"
          }
        },
        "Issuer": {
          "target": "com.amazonaws.licensemanager#IssuerDetails",
          "traits": {
            "smithy.api#documentation": "<p>Granted license issuer.</p>"
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the granted license.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseStatus",
          "traits": {
            "smithy.api#documentation":
"<p>Granted license status.</p>"
          }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
          }
        },
        "Beneficiary": {
          "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {

"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>Granted license metadata.</p>"
            }
        },
        "CreateTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Creation time of the granted license.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Version of the
granted license.</p>"
            }
        },
        "ReceivedMetadata": {
            "target": "com.amazonaws.licensemanager#ReceivedMetadata",
            "traits": {
                "smithy.api#documentation": "<p>Granted license received metadata.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
    }
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
```

```
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#GrantedLicense"
        }
    },
    "com.amazonaws.licensemanager#ISO8601DateTime": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[
0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
    },
    "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidParameterValueProvided",
                "httpResponseCode": 400
            },
            "smithy.api#documentation": "<p>One or more parameter values are not valid.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#InvalidResourceStateException":
{
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InvalidResourceState",
```

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            "httpResponseCode": 400
          },
          "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n          <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },
      "com.amazonaws.licensemanager#InventoryFilter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",

    "traits": {
              "smithy.api#documentation": "<p>Name of the filter.</p>",
              "smithy.api#required": {}
            }
          },
          "Condition": {
            "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
            "traits": {
              "smithy.api#documentation": "<p>Condition of the filter.</p>",
              "smithy.api#required": {}
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An inventory filter.</p>"
        }
      },
      "com.amazonaws.licensemanager#InventoryFilterCondition": {
        "type": "enum",
        "members": {
          "EQUALS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "EQUALS"
            }
          },
          "NOT_EQUALS": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "NOT_EQUALS"
            }
          },
          "BEGINS_WITH": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "BEGINS_WITH"
            }
          },
          "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CONTAINS"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",

    "member": {
            "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
      },
      "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Issuer name.</p>",
              "smithy.api#required": {}
            }
          },
          "SignKey": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage of sign and verify, \n          and support the RSASSA-PSS SHA-256 signing
algorithm.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details
```

```
about the issuer of a license.</p>"
        }
      },
      "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Issuer name.</p>"
            }
          },
          "SignKey": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage of sign and verify, \n          and support the RSASSA-PSS SHA-256 signing
algorithm.</p>"
            }
          },
          "KeyFingerprint": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Issuer key fingerprint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
        }
      },
      "com.amazonaws.licensemanager#License": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>"
            }
          },
          "ProductName": {
```

```
            "target": "com.amazonaws.licensemanager#String",

        "traits": {
                "smithy.api#documentation": "<p>Product name.</p>"
            }
        },
        "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Product SKU.</p>"
            }
        },
        "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
                "smithy.api#documentation": "<p>License issuer.</p>"
            }
        },
        "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Home Region of the license.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
             "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
                "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
            }
        },
        "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>License beneficiary.</p>"
            }
        },
        "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
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            },

        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>License metadata.</p>"
            }
        },
        "CreateTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>License creation time.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation":
"<p>License version.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
      }
    },
    "com.amazonaws.licensemanager#LicenseConfiguration": {
      "type": "structure",
      "members": {
        "LicenseConfigurationId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
            }
        },
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
        },
        "Name": {
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```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the license configuration.</p>"
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
          },
          "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
              "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
            }
          },
          "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
              "smithy.api#documentation":
"<p>License rules.</p>"
            }
          },
          "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
          },
          "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
          },
          "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
          },
          "ConsumedLicenses":
{
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
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            "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Status of the license configuration.</p>"
          }
        },
        "OwnerAccountId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"
          }
        },
        "ConsumedLicenseSummaryList": {
          "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
          "traits": {

  "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
          }
        },
        "ManagedResourceSummaryList": {
          "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
          "traits": {
            "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
          }
        },
        "ProductInformationList": {
          "target": "com.amazonaws.licensemanager#ProductInformationList",
          "traits": {
            "smithy.api#documentation": "<p>Product information.</p>"
          }
        },
        "AutomatedDiscoveryInformation": {
          "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
          "traits": {
            "smithy.api#documentation": "<p>Automated discovery information.</p>"

        }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used.</p>"
```

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        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"

       }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Type of server resource.</p>"
            }
          },
          "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource consuming licenses.</p>"
            }
          },
          "AssociationTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
            }
          },
          "AmiAssociationScope": {
            "target":
 "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
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```
        "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
      }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
      "type": "enum",
      "members": {
        "AVAILABLE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "AVAILABLE"
          }
        },

        "DISABLED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DISABLED"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
          }
        },
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Type of resource.</p>"
          }
        },
        "ResourceStatus": {
          "target": "com.amazonaws.licensemanager#String",
           "traits": {
            "smithy.api#documentation": "<p>Status of the resource.</p>"
          }
        },
        "ResourceOwnerId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
          }
        },
```

```
            "AssociationTime": {
               "target": "com.amazonaws.licensemanager#DateTime",
               "traits": {
                  "smithy.api#documentation": "<p>Time when the license configuration was initially associated with the resource.</p>"
               }
            },
            "ConsumedLicenses": {
               "target": "com.amazonaws.licensemanager#BoxLong",
               "traits": {
                  "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license configuration.</p>"
         }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
         }
      },
      "com.amazonaws.licensemanager#LicenseConfigurations": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfiguration"
         }
      },
      "com.amazonaws.licensemanager#LicenseConversionContext": {
         "type": "structure",
         "members": {
            "UsageOperation": {
               "target": "com.amazonaws.licensemanager#UsageOperation",
               "traits": {
                  "smithy.api#documentation":
 "<p>The Usage operation value that corresponds to the license type you are converting your resource from.  For more information about which platforms correspond to which usage operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n      </p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
         }
```

```
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
      "type": "structure",
      "members": {
        "LicenseConversionTaskId": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"

    }
        },
        "ResourceArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n        conversion task.</p>"
          }
        },
        "SourceLicenseContext": {
          "target": "com.amazonaws.licensemanager#LicenseConversionContext",
          "traits": {
            "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
          }
        },
        "DestinationLicenseContext": {
          "target": "com.amazonaws.licensemanager#LicenseConversionContext",
          "traits": {
            "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
           }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
          "traits": {
            "smithy.api#documentation": "<p>The status of the conversion task.</p>"
          }
        },
        "StatusMessage": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
          }
        },
        "StartTime": {
          "target": "com.amazonaws.licensemanager#DateTime",
          "traits": {
            "smithy.api#documentation": "<p>The time the conversion task was started at.</p>"
```

```
            }
          },
          "LicenseConversionTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
             "traits": {
               "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
            }
          },
          "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTaskId": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTaskStatus":
{
        "type": "enum",
        "members": {
          "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "IN_PROGRESS"
            }
          },
          "SUCCEEDED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "SUCCEEDED"
            }
          },
          "FAILED": {
            "target": "smithy.api#Unit",
```

```
            "traits": {
              "smithy.api#enumValue": "FAILED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTasks": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
      },
      "com.amazonaws.licensemanager#LicenseCountingType":
{
        "type": "enum",
        "members": {
          "VCPU": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "vCPU"
            }
          },
          "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Instance"
            }
          },
          "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Core"
            }
          },
          "SOCKET": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Socket"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseDeletionStatus":
{
        "type": "enum",
        "members": {
          "PENDING_DELETE": {
            "target": "smithy.api#Unit",
```

```
            "traits": {
              "smithy.api#enumValue": "PENDING_DELETE"
            }
          },
          "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#License"
        }
      },
      "com.amazonaws.licensemanager#LicenseOperationFailure": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Resource type.</p>"
            }
          },
          "ErrorMessage": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Error message.</p>"
            }
          },
          "FailureTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Failure time.</p>"
            }
          },
          "OperationName": {
            "target": "com.amazonaws.licensemanager#String",
```

```
            "traits":
 {
                "smithy.api#documentation": "<p>Name of the operation.</p>"
            }
          },
          "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
            }
          },
          "OperationRequestedBy": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
            }
          },
          "MetadataList": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Reserved.</p>"
            }
          }

      },
        "traits": {
          "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseOperationFailureList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
        }
      },
      "com.amazonaws.licensemanager#LicenseSpecification": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "AmiAssociationScope": {
```

```
                "target": "com.amazonaws.licensemanager#String",
                "traits":
 {
                    "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>"
                }
              }
            },
            "traits": {
              "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
            }
          },
          "com.amazonaws.licensemanager#LicenseSpecifications": {
            "type": "list",
            "member": {
              "target": "com.amazonaws.licensemanager#LicenseSpecification"
            }
          },
          "com.amazonaws.licensemanager#LicenseStatus": {
            "type": "enum",
            "members": {
              "AVAILABLE": {
                "target": "smithy.api#Unit",
                "traits": {
                  "smithy.api#enumValue": "AVAILABLE"
                }
              },
              "PENDING_AVAILABLE": {
                "target": "smithy.api#Unit",

             "traits": {
                    "smithy.api#enumValue": "PENDING_AVAILABLE"
                }
              },
              "DEACTIVATED": {
                "target": "smithy.api#Unit",
                "traits": {
                  "smithy.api#enumValue": "DEACTIVATED"
                }
              },
              "SUSPENDED": {
                "target": "smithy.api#Unit",
                "traits": {
                  "smithy.api#enumValue": "SUSPENDED"
                }
              },
              "EXPIRED": {
                "target": "smithy.api#Unit",
```

```
            "traits": {
              "smithy.api#enumValue": "EXPIRED"
            }
          },
          "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_DELETE"
            }
          },

         "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseUsage": {
        "type": "structure",
        "members": {
          "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
            "traits": {
              "smithy.api#documentation": "<p>License entitlement usages.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseUsageException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
           }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "LicenseUsageFailure",
            "httpResponseCode": 412
          },
          "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
          "smithy.api#error": "client",
```

```
            "smithy.api#httpError": 412
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the specified license
configuration.</p>\n        <p>Resource associations need not consume licenses from a license configuration. \n
For example, an AMI or a stopped instance might not consume a license (depending
 on \n        the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
```

```
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {

            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
          "type": "structure",
          "members": {
            "LicenseConfigurationAssociations": {
              "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
              "traits": {
                "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }

        },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#ListDistributedGrants": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
          },
```

```
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {

  "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
        "type": "structure",
        "members": {
          "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
             "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n
  <li>\n            <p>\n              <code>GranteePrincipalARN</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>LicenseIssuerName</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
```

```
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      },
      "MaxResults": {
        "target": "com.amazonaws.licensemanager#MaxSize100",
        "traits": {
          "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
    "type": "structure",
    "members": {
      "Grants": {
        "target": "com.amazonaws.licensemanager#GrantList",
        "traits": {
          "smithy.api#documentation": "<p>Distributed grant details.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
```

```
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {

          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
      "type": "structure",
      "members": {
        "LicenseConfigurationArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
            "smithy.api#required": {}

      }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse": {
```

```
    "type": "structure",
    "members": {
      "LicenseOperationFailureList": {
        "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",

   "traits": {
            "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConfigurations": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
       },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Lists the license configurations for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArns":
{
                "target": "com.amazonaws.licensemanager#StringList",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanager#Filters",
                "traits": {
                    "smithy.api#documentation":
 "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n
        <li>\n            <p>\n                <code>licenseCountingType</code> - The dimension for which licenses are
counted.\n                Possible values are <code>vCPU</code> | <code>Instance</code> | <code>Core</code> |
<code>Socket</code>.</p>\n            </li>\n            <li>\n                <p>\n
<code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license enforcement is
used.</p>\n            </li>\n            <li>\n                <p>\n                <code>usagelimitExceeded</code> - A Boolean
value that indicates whether the available licenses have been exceeded.</p>\n            </li>\n        </ul>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse":
{
        "type": "structure",
```

```
    "members": {
      "LicenseConfigurations": {
        "target": "com.amazonaws.licensemanager#LicenseConfigurations",
        "traits": {
          "smithy.api#documentation": "<p>Information about the license configurations.</p>"
        }
      },
      "NextToken": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest":
```

```
{
        "type": "structure",
        "members": {
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#Filters",
            "traits": {
              "smithy.api#documentation": "<p>\n         Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
            }

    }
        },
        "traits": {
          "smithy.api#input": {}
        }
     },
     "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTasks": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
```

```
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                 "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest": {
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanager#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n            <li>\n                <p>\n                    <code>LicenseConfigurationArn</code>\n
```

```
            </p>\n            </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
          "type": "structure",
          "members": {
            "ReportGenerators": {
              "target": "com.amazonaws.licensemanager#ReportGeneratorList",
               "traits": {
                "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
```

```
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {

        "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
```

```
            "smithy.api#input":
{}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {
            "LicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersions": {
        "type": "operation",
        "input": {
            "target":
"com.amazonaws.licensemanager#ListLicenseVersionsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
```

```
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
        }

    },
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                    "smithy.api#required": {}
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#MaxSize100",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
             }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
        "type": "structure",
        "members": {
            "Licenses": {
                "target": "com.amazonaws.licensemanager#LicenseList",
                "traits": {
                    "smithy.api#documentation": "<p>License details.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
```

```
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenses": {
      "type": "operation",
      "input": {

"target": "com.amazonaws.licensemanager#ListLicensesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListLicensesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {

     "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListLicensesRequest": {
      "type": "structure",
      "members": {
        "LicenseArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
          }
```

```
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n
        </p>\n          </li>\n          <li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n
  </li>\n          <li>\n            <p>\n              <code>Status</code>\n            </p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListLicensesResponse":
{
          "type": "structure",
          "members": {
            "Licenses": {
              "target": "com.amazonaws.licensemanager#LicenseList",
              "traits": {
                "smithy.api#documentation": "<p>License details.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
```

```
    },
    "com.amazonaws.licensemanager#ListReceivedGrants": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
      },
      "output": {
        "target":
"com.amazonaws.licensemanager#ListReceivedGrantsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits":
{
        "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while
specifying the\n        recipient as this Amazon Web Services account, your organization, or an organizational unit\n
    (OU) to which this member account belongs.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
      },
```

```
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {

        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
              "smithy.api#required": {}
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ParentArn</code>\n            </p>\n
    </li>\n          <li>\n            <p>\n              <code>GranteePrincipalArn</code>\n            </p>\n
</li>\n        </ul>"
            }
          },
          "NextToken": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
              "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
        "type": "structure",
        "members": {
          "GrantArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n
          <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
           <code>LicenseIssuerName</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>LicenseArn</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>GrantStatus</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>GranterAccountId</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
             "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
        "type": "structure",
        "members": {
          "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
              "smithy.api#documentation": "<p>Received grant details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },

 "traits": {
          "smithy.api#output": {}
        }
      },
```

```
"com.amazonaws.licensemanager#ListReceivedLicenses": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
         },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists received licenses.</p>"
    }
},
"com.amazonaws.licensemanager#ListReceivedLicensesForOrganization": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
```

```
{
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {

       "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n
</ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
             "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
```

```
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#GrantedLicenseList",
            "traits": {
              "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
        "type": "structure",
        "members": {
          "LicenseArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>Status</code>\n
      </p>\n          </li>\n          <li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n
 </li>\n          <li>\n            <p>\n              <code>IssuerName</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }

           }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
          "type": "structure",
          "members": {
            "Licenses": {
              "target": "com.amazonaws.licensemanager#GrantedLicenseList",
              "traits": {
                "smithy.api#documentation": "<p>Received license details.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#ListResourceInventory": {
          "type": "operation",
          "input":
    {
            "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
```

```
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#FailedDependencyException"
            },
            {
              "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"

  },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
          "type": "structure",
          "members": {
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },

          "Filters": {
              "target": "com.amazonaws.licensemanager#InventoryFilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n are supported:</p>\n <ul>\n <li>\n <p>\n <code>account_id</code>
- The ID of the Amazon Web Services account that owns the resource.\n Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n
  <code>application_name</code> - The name of the application. \n Logical operators are
```

<code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n <code>license_included</code> - The type of license included. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.\n Possible values are <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n \n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>. \n \n \n \n <code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>. \n \n \n \n <code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account). \n \n "
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
        "type": "structure",
        "members": {
          "ResourceInventoryList": {
            "target": "com.amazonaws.licensemanager#ResourceInventoryList",
            "traits": {
              "smithy.api#documentation": " Information about the resources. "
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": " Token for the next set of results. "
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTagsForResource":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"

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        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {

    "smithy.api#documentation": "<p>Lists the tags for the specified resource. For more information about tagging support in\n          License Manager, see the <a href=\"https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html\">TagResource</a> operation.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
        "type": "structure",
        "members":
{
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>Information about the tags.</p>"
```

```
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListTokens": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListTokensRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListTokensResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
            "target": "com.amazonaws.licensemanager#ValidationException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists your tokens.</p>"
    }
},
"com.amazonaws.licensemanager#ListTokensRequest": {
    "type": "structure",
    "members": {
        "TokenIds": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": "<p>Token IDs.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
```

```
                "smithy.api#documentation": "<p>Filters
 to scope the results. The following filter is supported:</p>\n        <ul>\n        <li>\n        <p>\n
<code>LicenseArns</code>\n        </p>\n        </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListTokensResponse": {
          "type":
 "structure",
          "members": {
            "Tokens": {
              "target": "com.amazonaws.licensemanager#TokenList",
              "traits": {
                "smithy.api#documentation": "<p>Received token details.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
          },
```

```
        "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n consumption
 details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
```

```
      "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#Filters",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n       are supported:</p>\n       <ul>\n       <li>\n       <p>\n
<code>resourceArn</code> - The ARN of the license configuration resource.</p>\n       </li>\n       <li>\n
    <p>\n       <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | \n
\t<code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>).</p>\n       </li>\n       <li>\n
          <p>\n       <code>resourceAccount</code> - The ID of the account that owns the resource.</p>\n
   </li>\n       </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
          "LicenseConfigurationUsageList": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license configurations.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"

         }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#Location": {
        "type": "string"
      },
```

```
"com.amazonaws.licensemanager#Long": {
   "type": "long"
},
"com.amazonaws.licensemanager#ManagedResourceSummary": {
   "type": "structure",
   "members": {
      "ResourceType": {
         "target": "com.amazonaws.licensemanager#ResourceType",
         "traits": {
            "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
         }
      },
      "AssociationCount": {
         "target": "com.amazonaws.licensemanager#BoxLong",
         "traits": {
            "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
         }

  }
   },
   "traits": {
      "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
   }
},
"com.amazonaws.licensemanager#ManagedResourceSummaryList": {
   "type": "list",
   "member": {
      "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
   }
},
"com.amazonaws.licensemanager#MaxSize100": {
   "type": "integer",
   "traits": {
      "smithy.api#range": {
         "min": 1,
         "max": 100
      }
   }
},
"com.amazonaws.licensemanager#MaxSize3StringList": {
   "type": "list",
   "member": {
      "target": "com.amazonaws.licensemanager#String"
   },
   "traits": {
      "smithy.api#length": {
         "min": 0,
         "max": 3
```

```
            }
        }

    },
    "com.amazonaws.licensemanager#Message": {
        "type": "string"
    },
    "com.amazonaws.licensemanager#Metadata": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The key name.</p>"
                }
            },
            "Value": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The value.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
        }
    },
    "com.amazonaws.licensemanager#MetadataList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Metadata"
        }
    },
    "com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement maximum count is reached.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    },
    "com.amazonaws.licensemanager#Options": {
```

```
        "type": "structure",
        "members": {
            "ActivationOverrideBehavior": {
                "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
                "traits": {
                    "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of activating a grant.\n
        Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter.</p>\n <ul>\n <li>\n <p>As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n </li>\n <li>\n <p>As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization.</p>\n </li>\n <li>\n <p>As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant.</p>\n </li>\n
    </ul>\n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n <p>Use this value to activate a grant without replacing any member accounts\n active grants for the same product.</p>\n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n
   <p>Use this value to activate a grant and disable other active grants in any\n member accounts for the same product. This action will also replace their\n previously activated grants with this activated grant.</p>\n </dd>\n </dl>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted
 licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#OrganizationConfiguration": {
        "type": "structure",
        "members": {
            "EnableIntegration": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Enables Organizations integration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
    },
```

```
    "com.amazonaws.licensemanager#PrincipalArnList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#Arn"
      },
      "traits": {

    "smithy.api#length": {
          "min": 1,
          "max": 1
        }
      }
    },
    "com.amazonaws.licensemanager#ProductInformation": {
      "type": "structure",
      "members": {
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Resource type. The possible values are
<code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductInformationFilterList": {
          "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
          "traits": {
            "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code>
 which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies
the value to filter on. </p>\n        <p>Accepted values for <code>ProductInformationFilterName</code> are listed
here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. </p>\n
<p>The following filters and are supported when the resource type \n        is
<code>SSM_MANAGED</code>:</p>\n        <ul>\n        <li>\n        <p>\n        <code>Application
Name</code> - The name of the application.\n        Logical operator is <code>EQUALS</code>.</p>\n
</li>\n        <li>\n        <p>\n        <code>Application Publisher</code> - The publisher of the
application.\n        Logical operator is <code>EQUALS</code>.</p>\n        </li>\n        <li>\n
<p>\n        <code>Application Version</code> - The version of the
 application.\n        Logical operator is <code>EQUALS</code>.</p>\n        </li>\n        <li>\n
<p>\n        <code>Platform Name</code> - The name of the platform.\n        Logical operator is
<code>EQUALS</code>.</p>\n        </li>\n        <li>\n        <p>\n        <code>Platform
Type</code> - The platform type.\n        Logical operator is <code>EQUALS</code>.</p>\n        </li>\n
  <li>\n        <p>\n        <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services
resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>.  The
key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-
key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n
    </p>\n        </li>\n        <li>\n        <p>\n
```

<code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude from automated discovery.\n Logical operator is <code>NOT_EQUALS</code>. \n \n \n \n <code>License Included</code> - The type of license included.\n Logical operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n Possible values are: <code>sql-server-enterprise</code> | \n <code>sql-server-standard</code> | \n <code>sql-server-web</code> | \n <code>windows-server-datacenter</code>. \n \n \n The following filters and logical operators are supported when the resource type\n is <code>RDS</code>: \n \n \n \n <code>Engine Edition</code> - The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> | <code>oracle-se2</code> \n \t| <code>db2-se</code> | <code>db2-ae</code>. \n \n \n \n <code>License Pack</code> - The license pack.\n Logical operator is <code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n <code>olap</code>. \n \n ",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#documentation": " Describes product information for a license configuration. "
    }
},
"com.amazonaws.licensemanager#ProductInformationFilter":
{
    "type": "structure",
    "members": {
        "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " Filter name. ",
                "smithy.api#required": {}
            }
        },
        "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
                "smithy.api#documentation": " Filter value. "
            }
        },
        "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": " Logical operator. ",
                "smithy.api#required": {}
            }
        }
    },

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        "traits": {
          "smithy.api#documentation": "<p>Describes product information filters.</p>"
        }
      },
      "com.amazonaws.licensemanager#ProductInformationFilterList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#ProductInformationFilter"
        }
      },
      "com.amazonaws.licensemanager#ProductInformationList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#ProductInformation"
        }
      },
      "com.amazonaws.licensemanager#ProvisionalConfiguration": {
        "type": "structure",
        "members": {
          "MaxTimeToLiveInMinutes": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",

        "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#RateLimitExceededException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "RateLimitExceeded",
            "httpResponseCode": 429
          },
          "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 429
```

```
    }
},
"com.amazonaws.licensemanager#ReceivedMetadata": {
    "type": "structure",
    "members": {
        "ReceivedStatus": {
            "target": "com.amazonaws.licensemanager#ReceivedStatus",
            "traits": {
                "smithy.api#documentation": "<p>Received status.</p>"
            }
        },
        "ReceivedStatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
                "smithy.api#documentation": "<p>Received status reason.</p>"
            }
        },
        "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
                "smithy.api#documentation": "<p>Allowed operations.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
    }
},
"com.amazonaws.licensemanager#ReceivedStatus": {
    "type": "enum",
    "members": {
        "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
        },
        "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
```

```
        },
        "ACTIVE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "ACTIVE"
          }

},
        "FAILED_WORKFLOW": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "FAILED_WORKFLOW"
          }
        },
        "DELETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DELETED"
          }
        },
        "DISABLED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DISABLED"
          }
        },
        "WORKFLOW_COMPLETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "WORKFLOW_COMPLETED"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#RedirectException": {
      "type": "structure",

     "members": {
        "Location": {
          "target": "com.amazonaws.licensemanager#Location",
          "traits": {
            "smithy.api#httpHeader": "Location"
          }
        },
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
```

```
      "traits": {
        "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 308
      }
    },
    "com.amazonaws.licensemanager#RejectGrant": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#RejectGrantRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#RejectGrantResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
      }
    },
    "com.amazonaws.licensemanager#RejectGrantRequest":
{
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
```

```
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#RejectGrantResponse": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Grant ARN.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#GrantStatus",

          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#RenewType": {
      "type": "enum",
      "members": {
        "NONE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "None"
          }
        },
        "WEEKLY": {
          "target": "smithy.api#Unit",
          "traits": {
```

```
                "smithy.api#enumValue": "Weekly"
              }

      },
          "MONTHLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Monthly"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ReportContext": {
        "type": "structure",
        "members": {
          "licenseConfigurationArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that
this generator reports on.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
        }
      },
      "com.amazonaws.licensemanager#ReportFrequency": {

 "type": "structure",
        "members": {
          "value": {
            "target": "com.amazonaws.licensemanager#Integer",
            "traits": {
              "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated.  \n         The only supported value is <code>1</code>.</p>"
            }
          },
          "period": {
            "target": "com.amazonaws.licensemanager#ReportFrequencyType",
            "traits": {
              "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
or monthly.</p>"
            }
          }
        },
        "traits": {
```

```
            "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
          }
        },
        "com.amazonaws.licensemanager#ReportFrequencyType": {
          "type": "enum",
          "members":
{
            "DAY": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "DAY"
              }
            },
            "WEEK": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "WEEK"
              }
            },
            "MONTH": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "MONTH"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#ReportGenerator": {
          "type": "structure",
          "members": {
            "ReportGeneratorName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Name of the report generator.</p>"

           }
            },
            "ReportType": {
              "target": "com.amazonaws.licensemanager#ReportTypeList",
              "traits": {
                "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
              }
            },
            "ReportContext": {
              "target": "com.amazonaws.licensemanager#ReportContext",
              "traits": {
                "smithy.api#documentation": "<p>License configuration type for this generator.</p>"
              }
```

```
        },
        "ReportFrequency": {
          "target": "com.amazonaws.licensemanager#ReportFrequency",
          "traits": {
            "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
          }
        },
        "LicenseManagerReportGeneratorArn": {
          "target": "com.amazonaws.licensemanager#String",
           "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
          }
        },
        "LastRunStatus": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
          }
        },
        "LastRunFailureReason": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
          }
        },
        "LastReportGenerationTime": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Time
 the last report was generated at.</p>"
          }
        },
        "ReportCreatorAccount": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
          }
        },
        "Description": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Description of the report generator.</p>"
          }
        },
        "S3Location": {
          "target": "com.amazonaws.licensemanager#S3Location",
          "traits": {
```

```
                "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published to.</p>"
            }
        },

    "CreateTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Time the report was created.</p>"
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
                "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
      }
    },
    "com.amazonaws.licensemanager#ReportGeneratorList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ReportGenerator"
      }
    },
    "com.amazonaws.licensemanager#ReportGeneratorName": {
      "type": "string",

  "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 100
          }
      }
    },
    "com.amazonaws.licensemanager#ReportType": {
      "type": "enum",
      "members": {
        "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
          }
        },
        "LICENSE_CONFIGURATION_USAGE_REPORT": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "LicenseConfigurationUsageReport"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#ReportTypeList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#ReportType"

}
      },
      "com.amazonaws.licensemanager#ResourceInventory": {
        "type": "structure",
        "members": {
          "ResourceId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the resource.</p>"
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Type of resource.</p>"
            }
          },
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
          },
          "Platform": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Platform of the resource.</p>"
            }
          },
          "PlatformVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
            }
          },
          "ResourceOwningAccountId": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a resource.</p>"
    }
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#ResourceInventory"
    }
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
         }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
```

```
        }
      },
      "com.amazonaws.licensemanager#ResourceType": {
        "type": "enum",
        "members": {
          "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "EC2_INSTANCE"
            }
          },
          "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "EC2_HOST"
            }
          },
          "EC2_AMI": {
             "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "EC2_AMI"
            }
          },
          "RDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "RDS"
            }
          },
          "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#S3Location": {
        "type": "structure",
        "members": {
          "bucket": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the S3 bucket reports are published
to.</p>"
            }
          },
          "keyPrefix": {
```

```
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
        }
    },
    "com.amazonaws.licensemanager#ServerInternalException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "InternalError",
                "httpResponseCode": 500
            },
            "smithy.api#documentation":
 "<p>The server experienced an internal error. Try again.</p>",
            "smithy.api#error": "server",
            "smithy.api#httpError": 500
        }
    },
    "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 4096
            }
        }
    },
    "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 400
            },
            "smithy.api#pattern": "^[\\s\\S]+$"
        }
    },
    "com.amazonaws.licensemanager#String": {
```

```
        "type": "string"
      },
      "com.amazonaws.licensemanager#StringList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }

  },
      "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
          "Key": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The tag key.</p>"
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The tag value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about the tags for a resource. For more information about
tagging support in\n        License Manager, see the <a href=\"https://docs.aws.amazon.com/license-
manager/latest/APIReference/API_TagResource.html\">TagResource</a> operation.</p>"
        }
      },
      "com.amazonaws.licensemanager#TagKeyList":
  {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
      },
      "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Tag"
        }
      },
      "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#TagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
             },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified resource. The following
resources support\n        tagging in License Manager:</p>\n        <ul>\n        <li>\n        <p>Licenses</p>\n
    </li>\n        <li>\n        <p>Grants</p>\n        </li>\n        <li>\n        <p>License
configurations</p>\n        </li>\n        <li>\n        <p>Report generators</p>\n        </li>\n    </ul>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource. The following
examples provide an example\n        ARN for each supported resource in License Manager:</p>\n        <ul>\n
<li>\n        <p>Licenses -\n        <code>arn:aws:license-manager::111122223333:license:l-
EXAMPLE2da7646d6861033667f20e895</code>\n        </p>\n        </li>\n        <li>\n        <p>Grants
-\n        <code>arn:aws:license-manager::111122223333:grant:g-
EXAMPLE7b19f4a0ab73679b0beb52707</code>\n        </p>\n        </li>\n        <li>\n
<p>License configurations -\n        <code>arn:aws:license-manager:us-east-1:111122223333:license-
configuration:lic-EXAMPLE6a788d4c8acd4264ff0ecf2ed2d</code>\n        </p>\n        </li>\n        <li>\n

    <p>Report generators -\n        <code>arn:aws:license-manager:us-east-1:111122223333:report-
generator:r-EXAMPLE825b4a4f8fe5a3e0c88824e5fc6</code>\n        </p>\n        </li>\n    </ul>",
                    "smithy.api#required": {}
                }
```

```
            },
            "Tags": {
               "target": "com.amazonaws.licensemanager#TagList",
               "traits": {
                  "smithy.api#documentation": "<p>One or more tags.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanager#TagResourceResponse": {
         "type": "structure",
         "members": {},
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanager#TokenData": {
         "type": "structure",
          "members": {
            "TokenId": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Token ID.</p>"
               }
            },
            "TokenType": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
               }
            },
            "LicenseArn": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
               }
            },
            "ExpirationTime": {
               "target": "com.amazonaws.licensemanager#ISO8601DateTime",
               "traits":
{
                  "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC format.</p>"
               }
```

```
            },
            "TokenProperties": {
               "target": "com.amazonaws.licensemanager#MaxSize3StringList",
               "traits": {
                  "smithy.api#documentation": "<p>Data specified by the caller.</p>"
               }
            },
            "RoleArns": {
               "target": "com.amazonaws.licensemanager#ArnList",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
               }
            },
            "Status": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
                }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Describes a token.</p>"
         }
      },
      "com.amazonaws.licensemanager#TokenList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanager#TokenData"
         }
      },
      "com.amazonaws.licensemanager#TokenString": {
         "type": "string",
         "traits": {
            "smithy.api#length": {
               "min": 0,
               "max": 4096
            },
            "smithy.api#pattern": "^\\S+$"
         }
      },
      "com.amazonaws.licensemanager#TokenType": {
         "type": "enum",
         "members": {
            "REFRESH_TOKEN": {
               "target": "smithy.api#Unit",
               "traits": {
```

```
                    "smithy.api#enumValue": "REFRESH_TOKEN"
                }

            }
            }
        },
        "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException": {
            "type": "structure",
            "members": {
                "Message": {
                    "target": "com.amazonaws.licensemanager#Message"
                }
            },
            "traits": {
                "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request again.</p>",
                "smithy.api#error": "client",
                "smithy.api#httpError": 400
            }
        },
        "com.amazonaws.licensemanager#UntagResource": {
            "type": "operation",
            "input": {
                "target": "com.amazonaws.licensemanager#UntagResourceRequest"
            },
            "output": {
                "target": "com.amazonaws.licensemanager#UntagResourceResponse"
            },
            "errors": [
                {
                    "target": "com.amazonaws.licensemanager#AccessDeniedException"
                },
                {
                    "target": "com.amazonaws.licensemanager#AuthorizationException"
                },
                {
                    "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
                },
                {
                    "target": "com.amazonaws.licensemanager#RateLimitExceededException"
                },
                {
                    "target": "com.amazonaws.licensemanager#ServerInternalException"
                }
            ],
            "traits": {
                "smithy.api#documentation": "<p>Removes the specified tags from the specified resource.</p>"
            }
```

```
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
      "type": "structure",
      "members": {
        "ResourceArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation":
"<p>Amazon Resource Name (ARN) of the resource.</p>",
            "smithy.api#required": {}
          }
        },
        "TagKeys": {
          "target": "com.amazonaws.licensemanager#TagKeyList",
          "traits": {
            "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#UntagResourceResponse": {
      "type": "structure",
      "members": {},
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
       },
      "output": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#ConflictException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
             }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
         }
      },
      "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
         "type": "structure",
         "members": {
            "LicenseConfigurationArn": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                  "smithy.api#required": {}
               }
            },
            "LicenseConfigurationStatus": {
               "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
               "traits": {
                  "smithy.api#documentation": "<p>New status of the license configuration.</p>"

       }
            },
            "LicenseRules": {
               "target": "com.amazonaws.licensemanager#StringList",
               "traits": {
                  "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a
license\n         configuration is licenseAffinityToHost.</p>"
               }
            },
            "LicenseCount": {
               "target": "com.amazonaws.licensemanager#BoxLong",
               "traits": {
                  "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
```

```
            }
        },
        "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
            }
        },

        "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New name of the license configuration.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New description of the license configuration.</p>"
            }
        },
        "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
                "smithy.api#documentation": "<p>New product information.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {

     "smithy.api#documentation": "<p>When true, disassociates a resource when software is uninstalled.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
    "type": "operation",
```

```
        "input": {
          "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"

          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates a report generator.</p>\n
      <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
      },
      "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
          "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
              "smithy.api#required": {}
```

```
            }
          },
          "ReportGeneratorName": {
            "target": "com.amazonaws.licensemanager#ReportGeneratorName",
            "traits": {
              "smithy.api#documentation": "<p>Name of the report generator.</p>",
              "smithy.api#required": {}
            }

        },
          "Type": {
            "target": "com.amazonaws.licensemanager#ReportTypeList",
            "traits": {
              "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n <ul>\n <li>\n <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n </li>\n <li>\n <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n </li>\n </ul>",
              "smithy.api#required": {}
            }
          },
          "ReportContext": {
            "target": "com.amazonaws.licensemanager#ReportContext",
            "traits": {
              "smithy.api#documentation": "<p>The report context.</p>",
              "smithy.api#required":
 {}
            }
          },
          "ReportFrequency": {
            "target": "com.amazonaws.licensemanager#ReportFrequency",
            "traits": {
              "smithy.api#documentation": "<p>Frequency by which reports are generated.</p>",
              "smithy.api#required": {}
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientRequestToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the report
```

```
generator.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
            },
            {
                "target": "com.amazonaws.licensemanager#LicenseUsageException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
```

```
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified Amazon Web Services resource.</p>\n        <p>You can update the license specifications of AMIs, instances, and hosts.\n        You cannot update the license specifications for launch templates and CloudFormation templates, \n        as they send license configurations to the operation that creates the resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to add.</p>"
                }
            },
            "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                    "smithy.api#documentation": "<p>ARNs of the license configurations to remove.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettings": {
        "type": "operation",
        "input": {
```

```
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
        },
        "output":
{
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {

  "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where
the License Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used
for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
```

```
                "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account discovery.</p>"
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UsageOperation": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            }
        }
    },
    "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
         "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    }
  }
}
```


CheckoutBorrowLicense

Initialize stack step

spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd

```
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
```

```
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
```

```
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
```

```
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
 err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
```

```
 }
 return
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
```

```
Beneficiary *string

// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
```

```
 // This member is required.
 Validity *types.DatetimeRange

 // Information about
 the license.
 LicenseMetadata []types.Metadata

 // Tags to add to the license. For more information about tagging support in
 // License Manager, see the [TagResource]operation.
 //
 // [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
 Tags []types.Tag

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
```

```
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err
= addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
```

```
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return
 err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
```

OperationName: "CreateLicense",
}
}
AWS SDK for Go
Copyright 2015 Amazon.com, Inc. or its affiliates. All Rights Reserved.
Copyright 2014-2015 Stripe, Inc.
AssociateLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod
```

```
// License entitlements. Partial checkouts are not supported.
//
// This member is required.
Entitlements []types.EntitlementData

// Amazon Resource Name (ARN) of the license. The license must use the borrow
// consumption configuration.
//
// This member is required.
LicenseArn *string

// Information about constraints.
CheckoutMetadata []types.Metadata

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

// Information about constraints.
CheckoutMetadata []types.Metadata

// Allowed license entitlements.
EntitlementsAllowed
[]types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the license.
LicenseArn *string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
 err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
 middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options);
 err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
```

```
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
{
  "smithy": "2.0",
  "shapes": {
     "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
        "type": "integer"
     },
     "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
        "type": "long"
     },
     "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
        "type": "operation",
        "input": {
           "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
        },
        "output": {
           "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
        },
        "errors": [
           {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
           },
           {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
```

```
            },

        {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/DeregisterSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
            "Name": {
                "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The type of name to filter by.</p>"
             }
          },
          "Values": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
            }
          },
          "Operator": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
            "traits": {
              "smithy.api#documentation": "<p>An operator for filtering results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation":
"<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request.</p>"
                }
            },
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

        "traits": {
                    "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource specified \n\t\t\tin the request.</p>"
```

```
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
             }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target":
 "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
```

```
            "traits": {
                "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings
current status.</p>"
            }
        },
        "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
                "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
      "type": "structure",
      "members": {
        "AmiId": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
        },
        "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
        },
        "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
                "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
        },
        "AccountID": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
        },
```

```
            "Region": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
               }
            },
            "UsageOperation": {
               "target": "smithy.api#String",

   "traits": {
                  "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
               }
            },
            "ProductCode": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
               "traits": {
                  "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
               }
            },
            "LastUpdatedTime": {
               "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
               }
            },
            "SubscriptionName": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
               }
            },
            "OsVersion": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
               }
            },
            "SubscriptionProviderCreateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp when you registered
```

```
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
                }
            },
            "SubscriptionProviderUpdateTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
                }
            },
            "DualSubscription": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
                }
            },
            "RegisteredWithSubscriptionProvider": {
                "target": "smithy.api#String",
                "traits": {

      "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
```

```
    }
  },
  "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
       },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
      },
      {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
      }
    ],
    "traits": {
      "aws.api#service": {
        "sdkId": "License Manager Linux Subscriptions",
         "arnNamespace": "license-manager-linux-subscriptions",
        "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
      },
      "aws.auth#sigv4": {
        "name": "license-manager-linux-subscriptions"
```

```
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
      "additionalAllowedHeaders": [
        "*",
        "content-type",
        "x-amz-content-sha256",
        "x-amz-user-agent",
        "x-amzn-platform-id",
        "x-amzn-trace-id"
      ],
      "additionalExposedHeaders": [
        "x-amzn-errortype",
        "x-amzn-requestid",
        "x-amzn-trace-id"
      ]
    },
    "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
    "smithy.api#title": "AWS License Manager Linux Subscriptions",
    "smithy.rules#endpointRuleSet": {
      "version": "1.0",
      "parameters": {
        "Region": {
          "builtIn": "AWS::Region",
          "required": false,
          "documentation": "The AWS region used to dispatch the request.",
          "type": "String"
        },
        "UseDualStack": {
          "builtIn": "AWS::UseDualStack",
          "required": true,
          "default": false,
          "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
 support dual-stack, dispatching the request MAY return an error.",
           "type": "Boolean"
        },
        "UseFIPS": {
          "builtIn": "AWS::UseFIPS",
          "required": true,
          "default": false,
          "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
 configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
          "type": "Boolean"
        },
        "Endpoint": {
          "builtIn": "SDK::Endpoint",
          "required": false,
```

```
        "documentation": "Override the endpoint used to send this request",
        "type": "String"
      }
    },
    "rules": [
      {
        "conditions": [
          {
            "fn": "isSet",
            "argv": [
              {
                "ref": "Endpoint"
              }
            ]
          }
        ],
        "rules": [
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }

],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
          },
          {
            "conditions": [],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseDualStack"
                      },
                      true
                    ]
```

```
}
                        ],
                        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                        "type": "error"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": {
                                "ref": "Endpoint"
                            },
                            "properties": {},
                            "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"

            }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "isSet",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {

            "fn": "aws.partition",
                                    "argv": [
                                        {
                                            "ref": "Region"
                                        }
                                    ],
```

```
                "assign": "PartitionResult"
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {

                    "ref": "UseFIPS"
                            },
                            true
                        ]
                    },
                    {
                        "fn": "booleanEquals",
                        "argv": [
                            {
                                "ref": "UseDualStack"
                            },
                            true
                        ]
                    }

],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    true,
                                    {
                                        "fn": "getAttr",
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"

        },
                                    "supportsFIPS"
                                ]
                            }
                        ]
                    },
                    {
                        "fn": "booleanEquals",
```

```
                "argv": [
                  true,
                  {
                    "fn": "getAttr",
                    "argv": [

                     {
                          "ref": "PartitionResult"
                       },
                       "supportsDualStack"
                    ]
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [],

    "rules": [
                  {
                    "conditions": [],
                    "endpoint": {
                      "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                      "properties": {},
                      "headers": {}
                    },
                    "type": "endpoint"
                  }
                ],

            "type": "tree"
                  }
                ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",
                "type": "error"
              }
            ],
            "type": "tree"
          },
          {
```

```
            "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },
                    true
                  ]
                }
              ],
              "rules": [
                {
                  "conditions": [
                    {

          "fn": "booleanEquals",
                      "argv": [
                        {
                          "fn": "getAttr",
                          "argv": [
                            {
                              "ref": "PartitionResult"
                            },
                            "supportsFIPS"
                          ]
                        },
                        true

                    ]
                    }
                  ],
                  "rules": [
                    {
                      "conditions": [],
                      "rules": [
                        {
                          "conditions": [],
                          "endpoint": {
                            "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                            "headers": {}
                          },
                          "type": "endpoint"
                        }
                      ],
```

```
                    "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "FIPS is enabled
but this partition does not support FIPS",
            "type": "error"
        }
    ],
    "type": "tree"
},
{
    "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
                {
                    "ref": "UseDualStack"
                },
                true

            ]
        }
    ],
    "rules": [
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        true,
                        {
                            "fn": "getAttr",
                            "argv": [
                                {

                                    "ref": "PartitionResult"
                                },
                                "supportsDualStack"
                            ]
                        }
                    ]
                }
            ],
            "rules": [
```

```
                                    {
                                        "conditions": [],
                                        "rules": [

        {
                                                "conditions": [],
                                                "endpoint": {
                                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                    "properties": {},
                                                    "headers": {}
                                                },
                                                "type": "endpoint"
                                            }
                                        ],
                                        "type": "tree"

                    }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "rules": [
                            {
                                "conditions": [],
                                "endpoint": {
                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                    "properties": {},
                                    "headers": {}
                                },
                                "type": "endpoint"
                            }
                        ],
                        "type": "tree"
                    }
                ],
                "type": "tree"
```

```
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
            }
        ],
        "type": "tree"
    }
  ]
},
"smithy.rules#endpointTests": {
  "testCases": [
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

  }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {

   "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
```

```
                "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
              }

        },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {

  "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
              }
            },
            "params": {
              "Region": "cn-north-1",
              "UseFIPS": true,
```

```
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
            }
           },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {

    "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
```

```
            }

        },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {

      "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
```

```
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
      "expect": {
        "error": "DualStack is enabled but this partition does not support DualStack"
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS":
false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-isob-east-1",
        "UseFIPS": true,
        "UseDualStack": true
```

```
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
       }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
    "expect": {
      "error": "DualStack is enabled but this partition does not support DualStack"
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": true
    }
  },
  {

   "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
      }
    },
    "params": {
      "Region": "us-isob-east-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
    "expect": {
      "endpoint": {
        "url": "https://example.com"
      }
```

```
    },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://example.com"
                  }
                },
                "params": {
                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {

                "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                "expect": {
                  "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": true,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                "expect": {
                  "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
                },
                "params": {

 "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true,
                  "Endpoint": "https://example.com"
                }
              },
```

```
                {
                  "documentation": "Missing region",
                  "expect": {
                    "error": "Invalid Configuration: Missing Region"
                  }
                }
              ],
              "version": "1.0"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled LinuxSubscriptionsDiscovery"

        },
              {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled LinuxSubscriptionsDiscovery"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
          "type": "structure",
          "members": {
            "SourceRegions": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
              "traits": {
                "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
                "smithy.api#required": {}
              }
            },
            "OrganizationIntegration": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
              "traits": {
                "smithy.api#documentation":
 "<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
                "smithy.api#required": {}
              }
            }
```

```
        },
        "traits": {
            "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },

 {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptionInstances"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "Instances"
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
{
        "type": "structure",
        "members": {
            "Filters": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
```

```
            "traits": {
                "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the \n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n \t<code>Value</code>, such as <code>us-west</code>.</p>\n        <p>For each filter, you can specify one of the following values for the <code>Name</code> key \n    \tto streamline results:</p>\n        <ul>\n        <li>\n  <p>\n            <code>AccountID</code>\n          </p>\n        </li>\n        <li>\n          <p>\n    <code>AmiID</code>\n          </p>\n        </li>\n        <li>\n          <p>\n <code>DualSubscription</code>\n          </p>\n        </li>\n        <li>\n          <p>\n <code>InstanceID</code>\n          </p>\n        </li>\n        <li>\n          <p>\n <code>InstanceType</code>\n          </p>\n        </li>\n        <li>\n          <p>\n <code>ProductCode</code>\n          </p>\n        </li>\n        <li>\n          <p>\n <code>Region</code>\n          </p>\n        </li>\n        <li>\n          <p>\n <code>Status</code>\n          </p>\n        </li>\n        <li>\n          <p>\n <code>UsageOperation</code>\n          </p>\n        </li>\n      </ul>\n      <p>For each filter, you can use one of the following <code>Operator</code>\n values to \n  \t\tdefine the behavior of the filter:</p>\n      <ul>\n        <li>\n          <p>\n <code>contains</code>\n          </p>\n        </li>\n        <li>\n          <p>\n <code>equals</code>\n          </p>\n        </li>\n        <li>\n          <p>\n <code>Notequal</code>\n          </p>\n        </li>\n      </ul>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to
 start paginating. This \n\tis the nextToken from a previously truncated response.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
```

```
            "Instances": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
               "traits": {
                  "smithy.api#documentation": "<p>An array that contains instance objects.</p>"
               }
            },
            "NextToken": {

         "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
               }
            }
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
             {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/subscription/ListLinuxSubscriptions"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
               "inputToken": "NextToken",
```

```
                "outputToken": "NextToken",
                "pageSize": "MaxResults",

    "items": "Subscriptions"
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
          "type": "structure",
          "members": {
            "Filters": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n          <p>The valid names for this filter are:</p>\n          <ul>\n
<li>\n              <p>\n                <code>Subscription</code>\n              </p>\n            </li>\n          </ul>\n
<p>The
 valid Operators for this filter are:</p>\n          <ul>\n            <li>\n              <p>\n
<code>contains</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
<code>equals</code>\n              </p>\n            </li>\n            <li>\n              <p>\n
<code>Notequal</code>\n              </p>\n            </li>\n          </ul>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
              "traits": {
                "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
                "smithy.api#length": {
                  "min": 1,
                  "max": 16384
                }
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
          }
        },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
      "type": "structure",
      "members": {
        "Subscriptions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
          "traits": {
            "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
           "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/subscription/ListRegisteredSubscriptionProviders"
```

```
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "RegisteredSubscriptionProviders"
            }
         }

      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
         "type": "structure",
         "members": {
            "SubscriptionProviderSources": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
               "traits": {
                  "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
                  "smithy.api#range": {
                     "min": 1,
                     "max": 100
                  }
               }

   },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
         "type": "structure",
         "members": {
            "RegisteredSubscriptionProviders": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria \n\t\t\tyou specified in the request.</p>"
            }
          },

         "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {

       "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#readonly": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
             "traits": {
               "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to
list metadata tags.</p>",
               "smithy.api#httpLabel": {},
               "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "EQUAL",
              "value": "Equal",
              "documentation": "Equal operator"
            },
            {
              "name": "NOT_EQUAL",
              "value": "NotEqual",
              "documentation": "Not equal operator"
            },
            {
```

```
                "name": "CONTAINS",
                "value": "Contains",
                "documentation": "Contains operator"
              }
            ],
            "smithy.api#length": {
              "min": 1,
              "max": 20
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "Enabled",
                "value": "Enabled",
                "documentation": "Enabled OrganizationIntegration"
              },
              {
                "name": "Disabled",
                "value": "Disabled",
                "documentation": "Disabled OrganizationIntegration"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
          "type": "list",
          "member": {
            "target": "smithy.api#String"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
           },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/RegisterSubscriptionProvider"

          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
              "smithy.api#required": {}
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
      "type": "structure",
      "members": {
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
            "smithy.api#documentation":
"<p>The Linux subscription provider that you registered.</p>"
          }
        },
        "SubscriptionProviderArn": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
          }
        },
        "SubscriptionProviderStatus": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
      "type": "structure",
      "members": {
        "SubscriptionProviderArn": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
          }
        },
        "SubscriptionProviderSource": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
          "traits": {
            "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
          }
        },
```

```
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                 "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is the offline token.</p>"
                }
            },
            "SubscriptionProviderStatus": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
                }
            },
            "SubscriptionProviderStatusMessage": {
                "target": "smithy.api#String",
                "traits":
{
                    "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
                }
            },
            "LastSuccessfulDataRetrievalTime": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
```

```
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
        "type": "string",
        "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

  }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
        "type": "string",
        "traits": {
            "smithy.api#enum": [
                {
                    "name": "InProgress",
                    "value": "InProgress",
                    "documentation": "InProgress status"
                },
                {
                    "name": "Completed",
                    "value": "Completed",
                    "documentation": "Completed status"
                },
                {
                    "name": "Successful",
                    "value": "Successful",
                    "documentation": "Successful status"
                },
                {
                    "name": "Failed",
                    "value": "Failed",
                    "documentation": "Failed status"
                }
            ]
        }
    },

   "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
        "type": "list",
        "member": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#length": {
                "min": 1,
                "max": 100
              }
            }
          },
          "traits": {
            "smithy.api#length": {
              "min": 1,
              "max": 100
            },
            "smithy.api#uniqueItems": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
          "type": "map",
          "key": {
            "target": "smithy.api#String"
          },
          "value": {
            "target": "smithy.api#String"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
          "type": "structure",
          "members": {
            "Name":
{
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The name of the subscription.</p>"
              }
            },
            "Type": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
              }
            },
            "InstanceCount": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
              "traits": {
                "smithy.api#documentation": "<p>The total amount of running instances using this
```

```
subscription.</p>"
                }
              }
            },
            "traits": {
              "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
            }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
            "type": "list",
            "member": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
            }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
            "type": "string",
            "traits": {
              "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
            }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
            "type": "string",
            "traits": {
              "smithy.api#enum": [

 {
                    "name": "RedHat",
                    "value": "RedHat",
                    "documentation": "RedHat subscription provider namespace"
                }
              ]
            }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
            "type": "list",
            "member": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
            }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
            "type": "string",
            "traits": {
              "smithy.api#enum": [
                {
                  "name": "ACTIVE",
                  "value": "ACTIVE",
                  "documentation": "ACTIVE status"
```

```
            },
            {
               "name": "INVALID",
               "value": "INVALID",

"documentation": "INVALID status"
            },
            {
               "name": "PENDING",
               "value": "PENDING",
               "documentation": "PENDING status"
            }
         ]
      }
   },
   "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
      "type": "list",
      "member": {
         "target": "smithy.api#String"
      },
      "traits": {
         "smithy.api#length": {
            "min": 0,
            "max": 50
         },
         "smithy.api#sensitive": {}
      }
   },
   "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
      "type": "operation",
      "input": {
         "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
      },
      "output": {
         "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
       },
      "errors": [
         {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
         },
         {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
         },
         {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
         }
      ],
      "traits": {
```

```
            "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
            "smithy.api#http": {
               "method": "PUT",
               "uri": "/tags/{resourceArn}"
            },
            "smithy.api#idempotent": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
         "type": "structure",
         "members":
{
            "resourceArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                  "smithy.api#httpLabel": {},
                  "smithy.api#required": {}
               }
            },
            "tags": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
               "traits": {
                  "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource.
Tags are \n\t\t\tformatted as key value pairs.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }

      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
         "type": "structure",
         "members": {},
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
         "type": "map",
         "key": {
            "target": "smithy.api#String"
         },
```

```
        "value": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation":
 "<p>The request was denied due to request throttling.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
           "smithy.api#http": {
            "method": "DELETE",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
          "resourceArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "tagKeys": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
            "traits": {

           "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
              "smithy.api#httpQuery": "tagKeys",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

       },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                    "smithy.api#required": {}
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowUpdate": {
                "target": "smithy.api#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region.</p>"
                }
            }
        }
    },
```

```
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
      "type": "structure",
      "members": {
        "LinuxSubscriptionsDiscovery": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
          "traits": {
            "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
          }
        },
        "LinuxSubscriptionsDiscoverySettings": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
           "traits": {
            "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
          "traits": {
            "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
          }
        },
        "StatusMessage": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
          "traits": {
            "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
          }

     },
        "HomeRegions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
          "traits": {
            "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated data for Linux\n      subscriptions.</p>"
          }
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
```

```
            "traits": {
                "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
                "smithy.api#error": "client"
            }
        }
    }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
```

```
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType

 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
```

```
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
```

```
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
```

```
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "AssociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType
```

```
 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string

 // License entitlements.
 //
 // This member is required.
 Entitlements []types.EntitlementData

 // Key fingerprint identifying the license.
 //
 // This member is required.
 KeyFingerprint *string

 // Product SKU.
 //
 // This member is required.
 ProductSKU *string

 // License beneficiary.
 Beneficiary *string

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

 // Checkout type.
 CheckoutType types.CheckoutType

 // Allowed license entitlements.
 EntitlementsAllowed []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the checkout license.
 LicenseArn
```

```
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string

// Signed token.
SignedToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
```

```
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
```

```
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
```

OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent

AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about an Active Directory identity
```

```
provider.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
        "type": "structure",
        "members": {
            "DomainName": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
                }
            },
            "DomainIpv4List": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
                    "smithy.api#length": {
                        "min": 1,
                        "max": 2
                    }
                }
            },
            "DomainCredentialsProvider": {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
                }
            },
            "DomainNetworkSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
        "type": "string",
        "traits": {
```

```
            "smithy.api#enum": [
               {
                  "name": "SELF_MANAGED",
                  "value": "SELF_MANAGED",
                  "documentation": "SELF_MANAGED type of Active Directory"
               },
               {
                  "name": "AWS_MANAGED",
                  "value": "AWS_MANAGED",
                  "documentation": "AWS_MANAGED type of Active Directory"
               }
            ]
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Arn": {
         "type": "string",
         "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-
zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUser":
{
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
             },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n         <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n         </note>",
            "smithy.api#http":
 {
                "code": 200,
                "method": "POST",
                "uri": "/user/AssociateUser"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance that provides the user-based subscription.</p>",
                    "smithy.api#required": {}
                }
            },
             "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The identity provider for the user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Domain": {
                "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains information for the user to associate.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
            }
          }
        },
        "traits": {

    "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
        "type": "integer"
      },
      "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
           }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
          "smithy.api#error": "server"
        }
      },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },

      {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/license-server/CreateLicenseServerEndpoint"
        },
        "smithy.api#idempotent": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
      "type": "structure",
      "members": {
        "IdentityProviderArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case
of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed
Active Directory that contains user identity details.</p>",
                "smithy.api#required": {}
            }
        },
        "LicenseServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
            "traits": {
                "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for
the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables
administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                "smithy.api#required": {}
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse":
{
    "type": "structure",
    "members": {
        "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider
specified in the request.</p>"
            }
        },
        "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code>
resource.</p>"
            }
        }
    },
    "traits": {
```

```
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials
needed for \n\t\t\tuser administration in the Active Directory.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains information about the credential provider for user
\n\t\t\tadministration.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
         },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

 }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/license-server/DeleteLicenseServerEndpoint"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
          "LicenseServerEndpointArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
              "smithy.api#required": {}
            }
          },
           "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoint": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
            "traits": {
              "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
            }
          }
        },
```

```
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/DeregisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
```

```
{
        "type": "structure",
        "members": {
           "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                 "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity provider.</p>"
              }
           },
           "Product": {
              "target": "smithy.api#String",
              "traits": {
                 "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
              }
           },
           "IdentityProviderArn": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                 "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity provider to deregister.</p>"
              }
           }
        },
        "traits": {
           "smithy.api#input": {}
        }
     },
     "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
           "IdentityProviderSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
              "traits": {
                 "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider operation.</p>",
                 "smithy.api#required": {}
              }
           }
        },
        "traits": {
           "smithy.api#output": {}

   }
    },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#Directory": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
         },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/user/DisassociateUser"
        },
        "smithy.api#idempotent": {}
```

```
    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
user.</p>"
          }
        },
        "InstanceId": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
          }
        },
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
          }
        },
        "InstanceUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
          }
        },
        "Domain": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
      "type": "structure",
      "members": {
```

```
        "InstanceUserSummary":
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
              "smithy.api#length": {
                "min": 1
              },

    "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Attribute": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
            }
          },
          "Operation": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
            }
          },
```

```
            "Value": {
               "target": "smithy.api#String",
               "traits":
{
                  "smithy.api#documentation": "<p>Value of the filter.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results
from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific
\n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
         "type": "union",
         "members": {
            "ActiveDirectoryIdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource
contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
         "type": "structure",
         "members": {
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information
about \n\t\t\tan identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "Settings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
                "smithy.api#required": {}
            }
        },
        "Product": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                "smithy.api#required": {}
            }
        },
        "Status": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The status of the
 identity provider.</p>",
                "smithy.api#required": {}
            }
        },
        "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
            }
        },
        "FailureMessage": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes an identity provider.</p>"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
    "type": "list",
    "member": {

      "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
    "type": "structure",
```

```
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                    "smithy.api#required": {}
                }
            },
            "Products": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
                 "traits": {
                    "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                    "smithy.api#required": {}
                }
            },
            "LastStatusCheckDate": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The date of the last status check.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
```

```
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },

     "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
              "smithy.api#required": {}
            }
          },
          "InstanceUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
             }
          },
          "StatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
            }
          },
          "Domain": {
            "target": "smithy.api#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
            }
        },
        "AssociationDate": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
            }
        },
        "DisassociationDate": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
         "smithy.api#error": "server",
        "smithy.api#httpError": 500
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
      }
    },
```

```
"com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
    }
},
"com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
    "type": "service",
    "version": "2018-05-10",
    "operations": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
```

```
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
        },
        {

"target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

       "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
```

```
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
{
              "builtIn": "AWS::Region",
              "required": false,
              "documentation": "The AWS region used to dispatch the request.",
              "type": "String"
            },
            "UseDualStack": {
              "builtIn": "AWS::UseDualStack",
              "required": true,
              "default": false,
              "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
              "type": "Boolean"
            },
            "UseFIPS": {
              "builtIn": "AWS::UseFIPS",
              "required": true,
              "default": false,
              "documentation": "When true, send this request to the FIPS-compliant
 regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
              "type": "Boolean"
            },
            "Endpoint": {
              "builtIn": "SDK::Endpoint",
              "required": false,
              "documentation": "Override the endpoint used to send this request",
              "type": "String"
            }
          },
          "rules": [
            {
              "conditions": [
                {
                  "fn": "isSet",
                  "argv": [
                    {
                      "ref": "Endpoint"
                    }
                  ]
```

```
      }
    ],
    "rules": [
      {
        "conditions": [
          {
            "fn": "booleanEquals",
            "argv": [
              {
                "ref": "UseFIPS"
              },
              true
            ]
          }
        ],
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
        "type": "error"
      },
      {
        "conditions": [
          {

            "fn": "booleanEquals",
            "argv": [
              {
                "ref": "UseDualStack"
              },
              true
            ]
          }
        ],
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
        "type": "error"
      },
      {
        "conditions": [],
        "endpoint": {
          "url": {
            "ref": "Endpoint"
          },

"properties": {},
            "headers": {}
          },
          "type": "endpoint"
        }
      ],
      "type": "tree"
```

```
    },
    {
      "conditions": [
        {
          "fn": "isSet",
          "argv": [
            {
              "ref": "Region"
            }
          ]
        }
      ],
      "rules": [
        {
          "conditions": [
            {
              "fn": "aws.partition",

              "argv": [
                {
                  "ref": "Region"
                }
              ],
              "assign": "PartitionResult"
            }
          ],
          "rules": [
            {
              "conditions": [
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseFIPS"
                    },

true
                  ]
                },
                {
                  "fn": "booleanEquals",
                  "argv": [
                    {
                      "ref": "UseDualStack"
                    },
                    true
                  ]
                }
```

```
                ],
                "rules": [
                  {
                    "conditions": [
                      {

 "fn": "booleanEquals",
                        "argv": [
                          true,
                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },
                              "supportsFIPS"
                            ]
                          }
                        ]
                      },

                    {
                        "fn": "booleanEquals",
                        "argv": [
                          true,
                          {
                            "fn": "getAttr",
                            "argv": [
                              {
                                "ref": "PartitionResult"
                              },
                              "supportsDualStack"
                            ]
                          }

                ]
                      }
                    ],
                    "rules": [
                      {
                        "conditions": [],
                        "endpoint": {
                          "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                          "properties": {},
                          "headers": {}
                        },
                        "type": "endpoint"
```

```
                    }

    ],
                    "type": "tree"
                },
                {
                    "conditions": [],
                    "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [

 {
                            "ref": "UseFIPS"
                        },
                        true
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                {
                                    "fn": "getAttr",
                                    "argv": [

                {
                                        "ref": "PartitionResult"
                                    },
                                    "supportsFIPS"
                                ]
                            },
                            true
                        ]
                    }
                ],
                "rules": [
```

```
                                    {
                                        "conditions": [],
                                        "endpoint": {

                "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }
                                ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "FIPS is enabled but this partition does not support FIPS",
                                "type": "error"

}
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
                                        },
                                        true
                                    ]
                                }
                            ],
                            "rules": [
                                {

        "conditions": [
                                        {
                                            "fn": "booleanEquals",
                                            "argv": [
                                                true,
                                                {
                                                    "fn": "getAttr",
                                                    "argv": [
                                                        {
                                                            "ref": "PartitionResult"
                                                        },
```

```
                "supportsDualStack"
            ]

        }
            ]
        }
      ],
      "rules": [
        {
          "conditions": [],
          "endpoint": {
            "url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
            "properties": {},
            "headers": {}
          },
          "type": "endpoint"
        }

    ],
      "type": "tree"
    },
    {
      "conditions": [],
      "error": "DualStack is enabled but this partition does not support DualStack",
      "type": "error"
    }
  ],
  "type": "tree"
},
{
  "conditions": [],
  "endpoint": {
    "url": "https://license-manager-user-subscriptions.{Region}.{PartitionResult#dnsSuffix}",

  "properties": {},
      "headers": {}
    },
    "type": "endpoint"
  }
 ],
 "type": "tree"
}
],
"type": "tree"
},
{
```

```
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
              }
            ]
          },
          "smithy.rules#endpointTests": {
            "testCases": [
              {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                "expect":
{
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                  }
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": true,
                  "UseDualStack": true
                }
              },
              {
                "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                  }
                },
                "params": {
                  "Region": "us-east-1",

      "UseFIPS": true,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                  }
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": true
                }
```

```
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS":
true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint":
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```
{
                    "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                 "UseDualStack": false
            }
        },
        {
            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
                "endpoint":
{
                    "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
                }
            },
            "params": {
                "Region": "us-gov-east-1",
                "UseFIPS": true,
                "UseDualStack": false
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```
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
         "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
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```
                "Region": "us-iso-east-1",
                "UseFIPS": true,
                "UseDualStack": false

        }
            },
            {
              "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
              "expect": {
                "error": "DualStack is enabled but this partition does not support DualStack"
              },
              "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
                }

          },
              "params": {
                "Region": "us-iso-east-1",
                "UseFIPS": false,
                "UseDualStack": false
              }
            },
            {
              "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
              "expect": {
                "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
              },
              "params": {
                "Region": "us-isob-east-1",
                "UseFIPS": true,
                "UseDualStack": true
              }
            },
            {
              "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack
disabled",
              "expect": {
                "endpoint": {
                  "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
```

```
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-isob-east-1",

"UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {

         "endpoint": {
                "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
```

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                {
                  "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://example.com"
                    }
                  },
                  "params": {
                    "UseFIPS": false,
                    "UseDualStack":
false,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "For custom endpoint with fips enabled and dualstack disabled",
                  "expect": {
                    "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": false,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                  "expect": {
                    "error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true,
                    "Endpoint": "https://example.com"
                  }
                },
                {
                  "documentation": "Missing region",
                  "expect": {
                    "error": "Invalid Configuration: Missing Region"
                  }
                }
              ],
              "version": "1.0"
```

```
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
          "type": "structure",
          "members": {
            "ProvisioningStatus": {
              "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
               "traits": {
                 "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
              }
            },
            "HealthStatus": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
              "traits": {
                "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
              }
            },
            "Ipv4Address": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Information
 about a Remote Desktop Services (RDS) license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
          "type": "structure",
          "members": {
            "IdentityProviderArn": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
              }
            },
            "ServerType": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
              "traits": {
                "smithy.api#documentation": "<p>The type of license server.</p>"
              }
```

```
        },
        "ServerEndpoint": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

   "traits": {
              "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network \n\t\t\taddress of the RDS license server endpoint.</p>"
          }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is one.</p>"
          }
        },
        "LicenseServerEndpointId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
          "traits": {
            "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
          }
        },
        "LicenseServerEndpointArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits":
 {
            "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the RDS \n\t\t\tlicense server.</p>"
          }
        },
        "LicenseServerEndpointProvisioningStatus": {
          "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
          "traits": {
            "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license \n\t\t\tserver endpoint</p>"
          }
        },
        "LicenseServers": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
          "traits": {
            "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
          }
        },

       "CreationTime": {
          "target": "smithy.api#Timestamp",
```

```
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when License Manager created the license server endpoint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop Services (RDS) \n\t\t\tlicense server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

  "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "PROVISIONING",
              "value": "PROVISIONING",
              "documentation": ""
            },
            {
              "name": "PROVISIONING_FAILED",
              "value": "PROVISIONING_FAILED",
              "documentation": ""
            },
            {
              "name": "PROVISIONED",
              "value": "PROVISIONED",
              "documentation": ""
            },
            {
              "name": "DELETING",
              "value": "DELETING",
              "documentation": ""
            },
            {
              "name": "DELETION_FAILED",
              "value": "DELETION_FAILED",
```

```
            "documentation": ""

          },
          {
            "name": "DELETED",
            "value": "DELETED",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
      "type": "string",
      "traits": {
        "smithy.api#enum": [
          {
            "name": "HEALTHY",
            "value": "HEALTHY",
            "documentation": ""
          },
          {
            "name": "UNHEALTHY",
            "value": "UNHEALTHY",
            "documentation": ""
          },
          {
            "name": "NOT_APPLICABLE",
            "value": "NOT_APPLICABLE",
            "documentation": ""
          }
        ]
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
      "type": "structure",
      "members": {
        "ServerType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
          "traits": {
            "smithy.api#documentation": "<p>The type of license server.</p>",
            "smithy.api#required": {}
          }
```

```
            },
            "ServerSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {

            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
         ],
         "traits": {
```

```
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based subscriptions.</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/identity-provider/ListIdentityProviders"
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "IdentityProviderSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
         "type": "structure",
         "members": {
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single request.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n <ul>\n <li>\n <p>Product</p>\n </li>\n <li>\n <p>DirectoryId</p>\n </li>\n </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
         "type": "structure",
         "members": {
```

```
        "IdentityProviderSummaries": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

        "traits": {
            "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
            "smithy.api#required": {}
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
      "type": "operation",
       "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
```

```
    {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members":
{
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n              <p>Status</p>\n          </li>\n
        <li>\n              <p>InstanceId</p>\n          </li>\n        </ul>"
            }
          }
```

```
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that
contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest
criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next
 token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service
hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/license-server/ListLicenseServerEndpoints"
          },

        "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "LicenseServerEndpoints"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
             "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n              <p>IdentityProviderArn</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
```

```
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
        "type": "structure",
        "members": {
          "LicenseServerEndpoints": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
        "type":
 "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
```

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                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
{
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProvider": {
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            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
             "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n<ul>\n<li>\n<p>Status</p>\n</li>\n<li>\n<p>Username</p>\n</li>\n<li>\n<p>Domain</p>\n</li>\n</ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken \n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service
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hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
```

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    }
      }
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
    "type": "structure",
    "members": {
      "Tags": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
        "traits": {
          "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
      },
      {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
      },
```

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            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListUserAssociations"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "InstanceUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
        "type": "structure",
        "members": {
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance, which
 provides user-based subscriptions.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
```

```
      "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n        <ul>\n
   <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n          </li>\n
<li>\n            <p>Domain</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummaries": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the
next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username":
{
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for this product
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user.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
                    "smithy.api#required": {}
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
             "Status": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status of a product for this user.</p>",
                    "smithy.api#required": {}
                }
            },
            "ProductUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
                }
            },
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {

            "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
                }
            },
            "SubscriptionStartDate": {
                "target": "smithy.api#String",
                "traits": {
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                "smithy.api#documentation": "<p>The start date of a subscription.</p>"
              }
            },
            "SubscriptionEndDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The end date of a subscription.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
          "type":
 "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
          "type": "structure",
          "members": {
            "RdsSalCredentialsProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
              "traits": {
                "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider":
 {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
          },
```

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        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/identity-provider/RegisterIdentityProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {

     "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
 register.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
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            "traits": {
                "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>",
                "smithy.api#required": {}
            }
          },
          "Settings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
            "traits":
 {
                "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation":
 "<p>Metadata that describes the results of an identity provider operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
```

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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>The resource couldn't be found.</p>",

     "smithy.api#error": "client",
          "smithy.api#httpError": 404
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
        "type": "structure",
        "members": {
          "SecretId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
              "smithy.api#length": {
                "min": 1
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
        "type": "string",
        "traits": {
          "smithy.api#length": {

       "min": 5,
            "max": 200
          },
          "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
        "type": "structure",
        "members": {
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            "Endpoint": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
         "type": "union",
         "members": {
            "RdsSalSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
                "traits": {
                  "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
         "type": "string",
         "traits": {
            "smithy.api#enum": [
               {
                  "name": "RDS_SAL",
                  "value": "RDS_SAL",
                  "documentation": ""
               }
            ]
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
         "type": "structure",
         "members": {
            "message": {

   "target": "smithy.api#String"
            }
         },
         "traits": {
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            "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
            "Subnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                    "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                    "smithy.api#length": {
                        "min": 1
                    },
                    "smithy.api#required": {}
                }
            },
            "SecurityGroupId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

             "traits": {
                    "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
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            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

          },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n        <note>\n            <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/StartProductSubscription"
            }

    }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
        "type": "structure",
        "members": {
          "Username": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
              "smithy.api#required": {}
```

```
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {

 "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n         <p>Valid values:
<code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> |
<code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n
</p>",
                "smithy.api#required": {}
            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to start the product \n\t\t\tsubscription.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
            }

 }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
```

```
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

    },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

    },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
        "smithy.api#http": {
          "code": 200,
          "method": "POST",
          "uri": "/user/StopProductSubscription"
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
      "type": "structure",
      "members": {
        "Username": {
          "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
            }
          },
          "IdentityProvider": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
            "traits": {
              "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "ProductUserArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"

            }
          },
          "Domain": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
              "smithy.api#required": {}
```

```
            }

  }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StringList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        },
        "traits": {
          "smithy.api#length": {

"min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
        },
```

```
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation":
"<p>Adds tags to a resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation":
"<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
```

```
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
          "smithy.api#http": {
            "method": "DELETE",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}

        }
          },
          "TagKeys": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
              "smithy.api#httpQuery": "tagKeys",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
```

```
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered
identity\n\t\t\tprovider.</p>",
          "smithy.api#http": {

      "code": 200,
            "method": "POST",
            "uri": "/identity-provider/UpdateIdentityProviderSettings"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
          "IdentityProvider": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
```

```
            "IdentityProviderArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to
update.</p>"
               }
            },
            "UpdateSettings": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
               "traits": {
                  "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n               <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
      <li>\n               <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n               <p>Security
 group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n         </ul>",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
         "type": "structure",
         "members": {
            "IdentityProviderSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
               "traits": {
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
         "type": "structure",
         "members": {
            "AddSubnets": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
                  "smithy.api#required": {}
```

```
            }
          },
          "RemoveSubnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
              "smithy.api#required": {}
            }
          },
          "SecurityGroupId": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
            "traits": {
              "smithy.api#documentation": "<p>A security group ID that
 allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for
activation servers.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A parameter is not valid.</p>",
          "smithy.api#error": "client"
        }
      }
    }
}
ListReceivedLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
```

OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

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```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if
 err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
```

```
 return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
 return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
 return err
```

```
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CheckoutLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
```

ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger

1.132 x-text 0.25.0

1.132.1 Available under license :

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DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY
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(INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE
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1.133 aws-sdk-go-v2-feature-dynamodb-attributevalue 1.19.0

1.133.1 Available under license :

```
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists received licenses.
func (c *Client) ListReceivedLicenses(ctx context.Context, params *ListReceivedLicensesInput, optFns
...func(*Options)) (*ListReceivedLicensesOutput, error) {
 if params == nil {
  params = &ListReceivedLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListReceivedLicenses", params, optFns,
c.addOperationListReceivedLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListReceivedLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListReceivedLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - ProductSKU
 //
 //   - Status
 //
 //
```

```
  - Fingerprint
//
//   - IssuerName
//
//   - Beneficiary
Filters []types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListReceivedLicensesOutput struct {

// Received license details.
Licenses []types.GrantedLicense

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListReceivedLicensesMiddlewares(stack *middleware.Stack, options Options) (err
error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListReceivedLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListReceivedLicenses{},
middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "ListReceivedLicenses"); err != nil {
```

```
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err =
addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
```

```
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListReceivedLicenses(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return
 err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListReceivedLicenses(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListReceivedLicenses",
```

```
 }
}
name: License Scan

on: [pull_request]

jobs:
 licensescan:
   name: License Scan
   runs-on: ubuntu-latest
   strategy:
     matrix:
       python-version: [3.9]

   steps:
     - name: Checkout target
       uses: actions/checkout@v2
       with:
         path: sdkbase
         ref: ${{ github.base_ref }}
     - name: Checkout this ref
       uses: actions/checkout@v2
       with:
         path: new-ref
         fetch-depth: 0
     - name: Get Diff
       run: git --git-dir ./new-ref/.git diff --name-only --diff-filter=ACMRT ${{ github.event.pull_request.base.sha }}
${{ github.sha }} > refDiffFiles.txt
     - name: Get Target Files
       run: git --git-dir ./sdkbase/.git ls-files | grep -xf refDiffFiles.txt - > targetFiles.txt
     - name: Checkout scancode
       uses: actions/checkout@v2
       with:
         repository: nexB/scancode-toolkit
         path: scancode-toolkit
         fetch-depth: 1
     - name: Set up Python ${{ matrix.python-version }}
        uses: actions/setup-python@v2
       with:
         python-version: ${{ matrix.python-version }}
     # ScanCode
     - name: Self-configure scancode
       working-directory: ./scancode-toolkit
       run: ./scancode --help
     - name: Run Scan code on target
       run: cat targetFiles.txt | while read filename; do echo ./sdkbase/$filename; done | xargs ./scancode-
toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> old-licenses.txt
     - name: Run Scan code on pr ref
```

run: cat refDiffFiles.txt | while read filename; do echo ./new-ref/$filename; done | xargs ./scancode-toolkit/scancode -l -n 30 --json-pp - | grep short_name | sort | uniq >> new-licenses.txt

compare

- name: License test

run: if ! cmp old-licenses.txt new-licenses.txt; then echo "Licenses differ! Failing."; exit -1; else echo "Licenses are the same. Success."; exit 0; fi

DeleteLicense

Initialize stack step

spanInitializeStart

RegisterServiceMetadata

legacyEndpointContextSetter

SetLogger

OperationInputValidation

spanInitializeEnd

Serialize stack step

spanBuildRequestStart

setOperationInput

ResolveEndpoint

OperationSerializer

Build stack step

ClientRequestID

ComputeContentLength

SetCredentialSourceMiddleware

UserAgent

AddTimeOffsetMiddleware

RecursionDetection

spanBuildRequestEnd

Finalize stack step

spanRetryLoop

Retry

RetryMetricsHeader

ResolveAuthScheme

GetIdentity

ResolveEndpointV2

disableHTTPS

ComputePayloadHash

setLegacyContextSigningOptions

Signing

Deserialize stack step

AddRawResponseToMetadata

ErrorCloseResponseBody

CloseResponseBody

ResponseErrorWrapper

RequestIDRetriever

OperationDeserializer

AddTimeOffsetMiddleware

RecordResponseTiming

RequestResponseLogger

```
ListLicenses
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
```

```
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Removes the Grafana Enterprise license from a workspace.
func (c *Client) DisassociateLicense(ctx context.Context, params *DisassociateLicenseInput, optFns
...func(*Options)) (*DisassociateLicenseOutput, error) {
 if params == nil {
  params = &DisassociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DisassociateLicense", params, optFns,
c.addOperationDisassociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*DisassociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DisassociateLicenseInput struct {

 // The type of license to remove from the workspace.
 //
 // This member is required.
 LicenseType types.LicenseType

 //
 The ID of the workspace to remove the Grafana Enterprise license from.
 //
 // This member is required.
 WorkspaceId *string

 noSmithyDocumentSerde
}

type DisassociateLicenseOutput struct {

 // A structure containing information about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
```

```
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDisassociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpDisassociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "DisassociateLicense");
 err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
```

```
 return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if
 err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDisassociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDisassociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options);
```

```
 err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opDisassociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "DisassociateLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Deletes the specified license.
func (c *Client) DeleteLicense(ctx context.Context, params *DeleteLicenseInput, optFns ...func(*Options))
(*DeleteLicenseOutput, error) {
 if params == nil {
  params = &DeleteLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "DeleteLicense", params, optFns,
c.addOperationDeleteLicenseMiddlewares)
```

```
 if err != nil {
  return nil, err
 }

 out := result.(*DeleteLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type DeleteLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // Current version of the license.
 //
 // This member is required.
 SourceVersion
 *string

 noSmithyDocumentSerde
}

type DeleteLicenseOutput struct {

 // Date when the license is deleted.
 DeletionDate *string

 // License status.
 Status types.LicenseDeletionStatus

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationDeleteLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpDeleteLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpDeleteLicense{}, middleware.After)
```

```
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "DeleteLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err !=
nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err
```

```
 != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpDeleteLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opDeleteLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if
 err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
```

```
}

func newServiceMetadataMiddleware_opDeleteLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "DeleteLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Lists the licenses for your account.
func (c *Client) ListLicenses(ctx context.Context, params *ListLicensesInput, optFns ...func(*Options))
(*ListLicensesOutput, error) {
 if params == nil {
  params = &ListLicensesInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "ListLicenses", params, optFns,
c.addOperationListLicensesMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*ListLicensesOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type ListLicensesInput struct {

 // Filters to scope the results. The following filters are supported:
 //
 //   - Beneficiary
 //
 //   - ProductSKU
 //
```

```
//   - Fingerprint
//
//   - Status
Filters
[]types.Filter

// Amazon Resource Names (ARNs) of the licenses.
LicenseArns []string

// Maximum number of results to return in a single call.
MaxResults *int32

// Token for the next set of results.
NextToken *string

noSmithyDocumentSerde
}

type ListLicensesOutput struct {

// License details.
Licenses []types.License

// Token for the next set of results.
NextToken *string

// Metadata pertaining to the operation's result.
ResultMetadata middleware.Metadata

noSmithyDocumentSerde
}

func (c *Client) addOperationListLicensesMiddlewares(stack *middleware.Stack, options Options) (err error) {
if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
 return err
}
err = stack.Serialize.Add(&awsAwsjson11_serializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpListLicenses{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack,
options, "ListLicenses"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
```

```
 return err
 }
 if err = addCredentialSource(stack, options); err != nil {
 return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opListLicenses(options.Region), middleware.Before);
err != nil {
 return err
 }
 if err = addRecursionDetection(stack); err != nil {
 return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
 return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
 return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
 return err
 }
 if err = addSpanInitializeStart(stack);
 err != nil {
 return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
 return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
 return err
 }
 return nil
}

func newServiceMetadataMiddleware_opListLicenses(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "ListLicenses",
 }
}
```

DisassociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
{
  "smithy": "2.0",
  "metadata": {
    "suppressions": [
      {
        "id": "HttpMethodSemantics",

```
            "namespace": "*"
        },
        {
            "id": "HttpResponseCodeSemantics",
            "namespace": "*"
        },
        {
            "id": "PaginatedTrait",
            "namespace": "*"
        },
        {
            "id": "HttpHeaderTrait",
            "namespace": "*"
        },
        {
            "id": "HttpUriConflict",
            "namespace": "*"
        },
        {
            "id": "Service",
            "namespace": "*"
        }
    ]
},
"shapes": {
    "com.amazonaws.licensemanager#AWSLicenseManager": {
        "type": "service",
        "version": "2018-08-01",
        "operations": [
            {
                "target": "com.amazonaws.licensemanager#AcceptGrant"
            },

 {
                "target": "com.amazonaws.licensemanager#CheckInLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutBorrowLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CheckoutLicense"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrant"
            },
            {
                "target": "com.amazonaws.licensemanager#CreateGrantVersion"
            },
```

```
    {
      "target": "com.amazonaws.licensemanager#CreateLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator"
     },
    {
      "target": "com.amazonaws.licensemanager#CreateLicenseVersion"
    },
    {
      "target": "com.amazonaws.licensemanager#CreateToken"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseConfiguration"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator"
    },
    {
      "target": "com.amazonaws.licensemanager#DeleteToken"
    },
    {
      "target": "com.amazonaws.licensemanager#ExtendLicenseConsumption"

  },
    {
      "target": "com.amazonaws.licensemanager#GetAccessToken"
    },
    {
      "target": "com.amazonaws.licensemanager#GetGrant"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicense"
    },
    {
      "target": "com.amazonaws.licensemanager#GetLicenseConfiguration"
```

```
},
{
   "target": "com.amazonaws.licensemanager#GetLicenseConversionTask"
},
{
   "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator"
},
{
   "target": "com.amazonaws.licensemanager#GetLicenseUsage"
},
{
   "target": "com.amazonaws.licensemanager#GetServiceSettings"
},
{
   "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration"
 },
{
   "target": "com.amazonaws.licensemanager#ListDistributedGrants"
},
{
   "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseConfigurations"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseConversionTasks"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenses"
},
{
   "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource"
},
{

  "target": "com.amazonaws.licensemanager#ListLicenseVersions"
},
{
   "target": "com.amazonaws.licensemanager#ListReceivedGrants"
},
{
   "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization"
},
{
```

```
        "target": "com.amazonaws.licensemanager#ListReceivedLicenses"
      },
      {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization"
      },
      {
        "target": "com.amazonaws.licensemanager#ListResourceInventory"
      },
      {
        "target": "com.amazonaws.licensemanager#ListTagsForResource"
      },
      {
        "target": "com.amazonaws.licensemanager#ListTokens"
      },
      {
        "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration"
       },
      {
        "target": "com.amazonaws.licensemanager#RejectGrant"
      },
      {
        "target": "com.amazonaws.licensemanager#TagResource"
      },
      {
        "target": "com.amazonaws.licensemanager#UntagResource"
      },
      {
        "target": "com.amazonaws.licensemanager#UpdateLicenseConfiguration"
      },
      {
        "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator"
      },
      {
        "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource"
      },
      {
        "target": "com.amazonaws.licensemanager#UpdateServiceSettings"
      }
    ],
    "traits": {
      "aws.api#service": {
         "sdkId": "License Manager",
        "arnNamespace": "license-manager",
        "cloudFormationName": "LicenseManager",
        "cloudTrailEventSource": "license-manager.amazonaws.com",
        "endpointPrefix": "license-manager"
      },
      "aws.auth#sigv4": {
```

```
      "name": "license-manager"
    },
    "aws.protocols#awsJson1_1": {},
    "smithy.api#documentation": "<p>License Manager makes it easier to manage licenses from software vendors across multiple \n         Amazon Web Services accounts and on-premises servers.</p>",
    "smithy.api#title": "AWS License Manager",
    "smithy.api#xmlNamespace": {
      "uri": "https://license-manager.amazonaws.com/doc/2018_08_01"
    },
    "smithy.rules#endpointRuleSet": {
      "version": "1.0",
      "parameters": {
        "Region": {
          "builtIn": "AWS::Region",
          "required": false,
          "documentation": "The AWS region used to dispatch the request.",
          "type": "String"
        },
        "UseDualStack": {
          "builtIn": "AWS::UseDualStack",
          "required": true,
          "default": false,
          "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
          "type": "Boolean"
        },
        "UseFIPS": {
          "builtIn": "AWS::UseFIPS",
          "required": true,
          "default": false,
          "documentation": "When true,
 send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
          "type": "Boolean"
        },
        "Endpoint": {
          "builtIn": "SDK::Endpoint",
          "required": false,
          "documentation": "Override the endpoint used to send this request",
          "type": "String"
        }
      },
      "rules": [
        {
          "conditions": [
            {
              "fn": "isSet",
              "argv": [
```

```
            {
              "ref": "Endpoint"
            }
          ]

        }
      ],
      "rules": [
        {
          "conditions": [
            {
              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseFIPS"
                },
                true
              ]
            }
          ],
          "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
          "type": "error"
        },
        {
          "conditions": [

    {
              "fn": "booleanEquals",
              "argv": [
                {
                  "ref": "UseDualStack"
                },
                true
              ]
            }
          ],
          "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
          "type": "error"
        },
        {
          "conditions": [],
          "endpoint": {
            "url": {
              "ref": "Endpoint"
            },
             "properties": {},
            "headers": {}
          },
```

```
                    "type": "endpoint"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "isSet",
                    "argv": [
                        {
                            "ref": "Region"
                        }
                    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {

"fn": "aws.partition",
                            "argv": [
                                {
                                    "ref": "Region"
                                }
                            ],
                            "assign": "PartitionResult"
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseFIPS"
                                        },

                    true
                                    ]
                                },
                                {
                                    "fn": "booleanEquals",
                                    "argv": [
                                        {
                                            "ref": "UseDualStack"
```

```
                                    },
                                    true
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {

                    "fn": "booleanEquals",
                                        "argv": [
                                            true,
                                            {
                                                "fn": "getAttr",
                                                "argv": [
                                                    {
                                                        "ref": "PartitionResult"
                                                    },
                                                    "supportsFIPS"
                                                ]
                                            }
                                        ]

            },
                                    {
                                        "fn": "booleanEquals",
                                        "argv": [
                                            true,
                                            {
                                                "fn": "getAttr",
                                                "argv": [
                                                    {
                                                        "ref": "PartitionResult"
                                                    },
                                                    "supportsDualStack"
                                                ]

    }
                                        ]
                                    }
                                ],
                                "rules": [
                                    {
                                        "conditions": [],
                                        "endpoint": {
                                            "url": "https://license-manager-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
```

```
                "properties": {},
                "headers": {}
              },
              "type": "endpoint"
            }

        ],
            "type": "tree"
          },
          {
            "conditions": [],
            "error": "FIPS and DualStack are enabled, but this partition does not support one or
both",
            "type": "error"
          }
        ],
        "type": "tree"
      },
      {
        "conditions": [
          {
            "fn": "booleanEquals",
            "argv": [

    {
              "ref": "UseFIPS"
            },
            true
          ]
          }
        ],
        "rules": [
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  {
                    "fn": "getAttr",
                    "argv": [

          {
                        "ref": "PartitionResult"
                      },
                      "supportsFIPS"
                    ]
                  },
                  true
```

```
                ]
              }
            ],
            "rules": [
              {
                "conditions": [],
                "endpoint": {

        "url": "https://license-manager-fips.{Region}.{PartitionResult#dnsSuffix}",
                  "properties": {},
                  "headers": {}
                },
                "type": "endpoint"
              }
            ],
            "type": "tree"
          },
          {
            "conditions": [],
            "error": "FIPS is enabled but this partition does not support FIPS",
            "type": "error"
          }

        ],
        "type": "tree"
      },
      {
        "conditions": [
          {
            "fn": "booleanEquals",
            "argv": [
              {
                "ref": "UseDualStack"
              },
              true
            ]
          }
        ],
        "rules": [
          {

"conditions": [
              {
                "fn": "booleanEquals",
                "argv": [
                  true,
                  {
                    "fn": "getAttr",
```

```
                                        "argv": [
                                            {
                                                "ref": "PartitionResult"
                                            },
                                            "supportsDualStack"
                                        ]

    }
                                    ]
                                }
                            ],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-
manager.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }

        ],
                                "type": "tree"
                            },
                            {
                                "conditions": [],
                                "error": "DualStack is enabled but this partition does not support DualStack",
                                "type": "error"
                            }
                        ],
                        "type": "tree"
                    },
                    {
                        "conditions": [],
                        "endpoint": {
                            "url": "https://license-manager.{Region}.{PartitionResult#dnsSuffix}",
                            "properties": {},

                          "headers": {}
                        },
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
            }
        ],
```

```
            "type": "tree"
          },
          {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
          }
        ]
      },
      "smithy.rules#endpointTests": {
        "testCases": [
          {
            "documentation": "For region af-south-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint":
{
                "url": "https://license-manager.af-south-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "af-south-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region ap-east-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.ap-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "ap-east-1",
              "UseFIPS": false,
              "UseDualStack": false
             }
          },
          {
            "documentation": "For region ap-northeast-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.ap-northeast-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "ap-northeast-1",
              "UseFIPS": false,
```

```
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-northeast-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-northeast-2.amazonaws.com"
             }
          },
          "params": {
            "Region": "ap-northeast-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-northeast-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-northeast-3.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-northeast-3",
            "UseFIPS": false,
            "UseDualStack": false
          }

    },
        {
          "documentation": "For region ap-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-south-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "ap-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region ap-southeast-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.ap-southeast-1.amazonaws.com"
```

```
}
            },
            "params": {
              "Region": "ap-southeast-1",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region ap-southeast-2 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.ap-southeast-2.amazonaws.com"
              }
            },
            "params": {
              "Region": "ap-southeast-2",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {

"documentation": "For region ap-southeast-3 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.ap-southeast-3.amazonaws.com"
              }
            },
            "params": {
              "Region": "ap-southeast-3",
              "UseFIPS": false,
              "UseDualStack": false
            }
          },
          {
            "documentation": "For region ca-central-1 with FIPS disabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager.ca-central-1.amazonaws.com"
              }
            },

           "params": {
              "Region": "ca-central-1",
              "UseFIPS": false,
              "UseDualStack": false
```

```
      }
    },
    {
      "documentation": "For region eu-central-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-central-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-central-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-north-1 with
FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-north-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "eu-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-south-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-south-1.amazonaws.com"
        }
      },
      "params": {
        "Region":
"eu-south-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region eu-west-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.eu-west-1.amazonaws.com"
```

```
            }
          },
          "params": {
            "Region": "eu-west-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-west-2 with FIPS disabled and DualStack disabled",
          "expect": {

           "endpoint": {
                "url": "https://license-manager.eu-west-2.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-2",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region eu-west-3 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.eu-west-3.amazonaws.com"
            }
          },
          "params": {
            "Region": "eu-west-3",
            "UseFIPS": false,

    "UseDualStack": false
          }
        },
        {
          "documentation": "For region me-south-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.me-south-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "me-south-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
```

```
        },
        {
          "documentation": "For region sa-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.sa-east-1.amazonaws.com"
             }
          },
          "params": {
            "Region": "sa-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }

    },
        {
          "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-east-2 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-east-2.amazonaws.com"
            }
```

```
    },
    "params": {
      "Region": "us-east-2",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-east-2 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-east-2.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-east-2",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region
us-west-1 with FIPS disabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager.us-west-1.amazonaws.com"
      }
    },
    "params": {
      "Region": "us-west-1",
      "UseFIPS": false,
      "UseDualStack": false
    }
  },
  {
    "documentation": "For region us-west-1 with FIPS enabled and DualStack disabled",
    "expect": {
      "endpoint": {
        "url": "https://license-manager-fips.us-west-1.amazonaws.com"
      }
    },
    "params": {

"Region": "us-west-1",
      "UseFIPS": true,
      "UseDualStack": false
    }
  },
```

```
    {
      "documentation": "For region us-west-2 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-west-2.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-west-2",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-west-2 with FIPS enabled and DualStack disabled",

"expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-west-2.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-west-2",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
         "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-east-1.api.aws"
        }
      },
      "params": {
```

```
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url":
"https://license-manager.cn-north-1.amazonaws.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": false,
                "UseDualStack": false
            }
        },
        {
            "documentation": "For region cn-northwest-1 with FIPS disabled and DualStack disabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager.cn-northwest-1.amazonaws.com.cn"
                }
            },
            "params": {
                "Region": "cn-northwest-1",
                "UseFIPS": false,
                "UseDualStack": false

    }
        },
        {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
            "expect": {
                "endpoint": {
                    "url": "https://license-manager-fips.cn-north-1.api.amazonwebservices.com.cn"
                }
            },
            "params": {
                "Region": "cn-north-1",
                "UseFIPS": true,
                "UseDualStack": true
            }
        },
        {
            "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
```

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      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },

  {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-fips.us-gov-east-1.amazonaws.com"

}
      },
      "params": {
        "Region": "us-gov-east-1",
```

```
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-west-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-gov-west-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-west-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation":
"For region us-gov-west-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-gov-west-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-west-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-gov-east-1.api.aws"
            }
          },

    "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
```

```
            "endpoint": {
              "url": "https://license-manager.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
             "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-fips.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
```

```
                {
                  "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
                  "expect": {
                    "error": "DualStack is enabled
but this partition does not support DualStack"
                  },
                  "params": {
                    "Region": "us-iso-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager.us-isob-east-1.sc2s.sgov.gov"
                    }
                  },
                  "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": false,
                    "UseDualStack": false
                  }
                },

               {
                  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
                  "expect": {
                    "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
                  },
                  "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-fips.us-isob-east-1.sc2s.sgov.gov"
                    }
                  },

            "params": {
                    "Region": "us-isob-east-1",
                    "UseFIPS": true,
```

```
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",

    "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }
          },
          "params": {
            "UseFIPS": false,

      "UseDualStack": false,
            "Endpoint": "https://example.com"
          }
        },
        {
          "documentation": "For custom endpoint with fips enabled and dualstack disabled",
          "expect": {
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
```

```
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": true,
                      "UseDualStack": false,
                      "Endpoint": "https://example.com"
                    }
                  },
                  {
                    "documentation": "For custom endpoint with fips disabled and dualstack enabled",
                    "expect": {
                      "error":
"Invalid Configuration: Dualstack and custom endpoint are not supported"
                    },
                    "params": {
                      "Region": "us-east-1",
                      "UseFIPS": false,
                      "UseDualStack": true,
                      "Endpoint": "https://example.com"
                    }
                  },
                  {
                    "documentation": "Missing region",
                    "expect": {
                      "error": "Invalid Configuration: Missing Region"
                    }
                  }
                ],
                "version": "1.0"
              }
            }
          },
          "com.amazonaws.licensemanager#AcceptGrant": {
            "type": "operation",
            "input": {
              "target": "com.amazonaws.licensemanager#AcceptGrantRequest"

 },
            "output": {
              "target": "com.amazonaws.licensemanager#AcceptGrantResponse"
            },
            "errors": [
              {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
              },
              {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
              },
```

```
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"

        }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Accepts the specified grant.</p>"
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantRequest": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#AcceptGrantResponse": {
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant
ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Grant version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#AccessDeniedException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {

"code": "ServiceAccessDenied",
            "httpResponseCode": 401
          },
          "smithy.api#documentation": "<p>Access to resource denied.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 401
        }
      },
      "com.amazonaws.licensemanager#ActivationOverrideBehavior": {
        "type": "enum",
        "members": {
          "DISTRIBUTED_GRANTS_ONLY": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISTRIBUTED_GRANTS_ONLY"
            }
          },
          "ALL_GRANTS_PERMITTED_BY_ISSUER": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ALL_GRANTS_PERMITTED_BY_ISSUER"
            }
          }
```

```
        }
      },
      "com.amazonaws.licensemanager#AllowedOperation": {

      "type": "enum",
        "members": {
          "CREATE_GRANT": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CreateGrant"
            }
          },
          "CHECKOUT_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckoutLicense"
            }
          },
          "CHECKOUT_BORROW_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckoutBorrowLicense"
            }
          },
          "CHECK_IN_LICENSE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CheckInLicense"
            }
          },
          "EXTEND_CONSUMPTION_LICENSE":
{
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ExtendConsumptionLicense"
            }
          },
          "LIST_PURCHASED_LICENSES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "ListPurchasedLicenses"
            }
          },
          "CREATE_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CreateToken"
            }
```

```
            }
          }
        },
        "com.amazonaws.licensemanager#AllowedOperationList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#AllowedOperation"
          },
          "traits": {
            "smithy.api#length": {
              "min": 1,
              "max":
8
            }
          }
        },
        "com.amazonaws.licensemanager#Arn": {
          "type": "string",
          "traits": {
            "smithy.api#length": {
              "min": 0,
              "max": 2048
            },
            "smithy.api#pattern": "^arn:aws(-(cn|us-gov|iso-b|iso-c|iso-d))?:[A-Za-z0-9][A-Za-z0-9_/.-]{0,62}:[A-Za-
z0-9_/.-]{0,63}:[A-Za-z0-9_/.-]{0,63}:[A-Za-z0-9][A-Za-z0-9:_/+=,@.-]{0,1023}$"
          }
        },
        "com.amazonaws.licensemanager#ArnList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#Arn"
          }
        },
        "com.amazonaws.licensemanager#AuthorizationException": {
          "type": "structure",
          "members": {
            "Message": {
              "target": "com.amazonaws.licensemanager#Message"
            }
          },
          "traits": {
            "aws.protocols#awsQueryError":
{
              "code": "AuthorizationFailure",
              "httpResponseCode": 403
            },
            "smithy.api#documentation": "<p>The Amazon Web Services user account does not have permission to
perform the action. Check the IAM\n          policy associated with this account.</p>",
```

```
            "smithy.api#error": "client",
            "smithy.api#httpError": 403
        }
    },
    "com.amazonaws.licensemanager#AutomatedDiscoveryInformation": {
        "type": "structure",
        "members": {
            "LastRunTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time that automated discovery last ran.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Describes automated discovery.</p>"
        }
    },

  "com.amazonaws.licensemanager#Boolean": {
        "type": "boolean",
        "traits": {
            "smithy.api#default": false
        }
    },
    "com.amazonaws.licensemanager#BorrowConfiguration": {
        "type": "structure",
        "members": {
            "AllowEarlyCheckIn": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates whether early check-ins are allowed.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxTimeToLiveInMinutes": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum time for the borrow configuration, in minutes.</p>",
                    "smithy.api#required": {}
                }
            }

},
        "traits": {
            "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
        }
    },
```

```
    "com.amazonaws.licensemanager#BoxBoolean": {
        "type": "boolean"
    },
    "com.amazonaws.licensemanager#BoxInteger": {
        "type": "integer"
    },
    "com.amazonaws.licensemanager#BoxLong": {
        "type": "long"
    },
    "com.amazonaws.licensemanager#CheckInLicense": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckInLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"

      },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks in the specified license. Check in a license when it is no longer
in use.</p>"
        }
```

```
    },
    "com.amazonaws.licensemanager#CheckInLicenseRequest":
{
        "type": "structure",
        "members": {
            "LicenseConsumptionToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License consumption token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Beneficiary": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>License beneficiary.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckInLicenseResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutBorrowLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#EntitlementNotAllowedException"
```

```
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {

 "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license for offline use.</p>"
         }
      },
      "com.amazonaws.licensemanager#CheckoutBorrowLicenseRequest": {
         "type": "structure",
         "members":
{
            "LicenseArn": {
               "target": "com.amazonaws.licensemanager#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The license must
use the borrow consumption configuration.</p>",
                  "smithy.api#required": {}
               }
            },
            "Entitlements": {
               "target": "com.amazonaws.licensemanager#EntitlementDataList",
               "traits": {
                  "smithy.api#documentation": "<p>License entitlements. Partial checkouts are not supported.</p>",
                  "smithy.api#required": {}
```

```
            }
          },
          "DigitalSignatureMethod": {
            "target": "com.amazonaws.licensemanager#DigitalSignatureMethod",
            "traits": {
              "smithy.api#documentation": "<p>Digital signature method. The possible
 value is JSON Web Signature (JWS) algorithm PS384.\n        For more information, see <a
href=\"https://tools.ietf.org/html/rfc7518#section-3.5\">RFC 7518 Digital Signature with RSASSA-PSS</a>.</p>",
              "smithy.api#required": {}
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
          },
          "CheckoutMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
              "smithy.api#documentation": "<p>Information about constraints.</p>"
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation":
 "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutBorrowLicenseResponse": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>License consumption token.</p>"
              }
            },
            "EntitlementsAllowed":
{
              "target": "com.amazonaws.licensemanager#EntitlementDataList",
              "traits": {
                "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
              }
            },
            "NodeId": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Node ID.</p>"
              }
            },
            "SignedToken": {
              "target": "com.amazonaws.licensemanager#SignedToken",
              "traits": {
                "smithy.api#documentation": "<p>Signed token.</p>"
              }
            },
            "IssuedAt": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout
is issued.</p>"
              }
            },
            "Expiration": {
              "target": "com.amazonaws.licensemanager#ISO8601DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Date and time at which the license checkout expires.</p>"
              }
            },
            "CheckoutMetadata": {
              "target": "com.amazonaws.licensemanager#MetadataList",
              "traits": {
                "smithy.api#documentation": "<p>Information about constraints.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#CheckoutLicense": {
          "type": "operation",
```

```
        "input": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#CheckoutLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#NoEntitlementsAllowedException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target":
"com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Checks out the specified license.</p>\n        <note>\n        <p>If the
account that created the license is the same that is performing the check out, you must\n        specify the account
as the beneficiary.</p>\n        </note>"
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseRequest": {
        "type": "structure",
        "members": {
```

```
        "ProductSKU": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product
SKU.</p>",
            "smithy.api#required": {}
          }
        },
        "CheckoutType": {
          "target": "com.amazonaws.licensemanager#CheckoutType",
          "traits": {
            "smithy.api#documentation": "<p>Checkout type.</p>",
            "smithy.api#required": {}
          }
        },
        "KeyFingerprint": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Key fingerprint identifying the license.</p>",
            "smithy.api#required": {}
          }
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementDataList",
          "traits": {
            "smithy.api#documentation": "<p>License entitlements.</p>",

    "smithy.api#required": {}
          }
        },
        "ClientToken": {
          "target": "com.amazonaws.licensemanager#ClientToken",
          "traits": {
            "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
            "smithy.api#required": {}
          }
        },
        "Beneficiary": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License beneficiary.</p>"
          }
        },
        "NodeId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Node ID.</p>"
```

```
            }
          }
        },
        "traits": {

        "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CheckoutLicenseResponse": {
        "type": "structure",
        "members": {
          "CheckoutType": {
            "target": "com.amazonaws.licensemanager#CheckoutType",
            "traits": {
              "smithy.api#documentation": "<p>Checkout type.</p>"
            }
          },
          "LicenseConsumptionToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License consumption token.</p>"
            }
          },
          "EntitlementsAllowed": {
            "target": "com.amazonaws.licensemanager#EntitlementDataList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed license entitlements.</p>"
            }
          },
           "SignedToken": {
            "target": "com.amazonaws.licensemanager#SignedToken",
            "traits": {
              "smithy.api#documentation": "<p>Signed token.</p>"
            }
          },
          "NodeId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Node ID.</p>"
            }
          },
          "IssuedAt": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and time at which the license checkout is issued.</p>"
            }
          },
          "Expiration": {
```

```
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Date and
time at which the license checkout expires.</p>"
            }
          },
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the checkout license.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CheckoutType": {
        "type": "enum",
        "members": {
          "PROVISIONAL": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PROVISIONAL"
            }
          },
          "PERPETUAL": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PERPETUAL"
            }
           }
        }
      },
      "com.amazonaws.licensemanager#ClientRequestToken": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 1,
            "max": 36
          }
        }
      },
      "com.amazonaws.licensemanager#ClientToken": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
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            "max": 2048
          },
          "smithy.api#pattern": "^\\S+$"
        }
      },
      "com.amazonaws.licensemanager#ConflictException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "ConflictException",
            "httpResponseCode":
409
          },
          "smithy.api#documentation": "<p>There was a conflict processing the request. Try your request
again.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 409
        }
      },
      "com.amazonaws.licensemanager#ConsumedLicenseSummary": {
        "type": "structure",
        "members": {
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Resource type of the resource consuming a license.</p>"
            }
          },
          "ConsumedLicenses": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
            }
          }
        },

  "traits": {
          "smithy.api#documentation": "<p>Details about license consumption.</p>"
        }
      },
      "com.amazonaws.licensemanager#ConsumedLicenseSummaryList": {
        "type": "list",
        "member": {
```

```
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummary"
          }
        },
        "com.amazonaws.licensemanager#ConsumptionConfiguration": {
          "type": "structure",
          "members": {
            "RenewType": {
              "target": "com.amazonaws.licensemanager#RenewType",
              "traits": {
                "smithy.api#documentation": "<p>Renewal frequency.</p>"
              }
            },
            "ProvisionalConfiguration": {
              "target": "com.amazonaws.licensemanager#ProvisionalConfiguration",
              "traits": {
                "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
               }
            },
            "BorrowConfiguration": {
              "target": "com.amazonaws.licensemanager#BorrowConfiguration",
              "traits": {
                "smithy.api#documentation": "<p>Details about a borrow configuration.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Details about a consumption configuration.</p>"
          }
        },
        "com.amazonaws.licensemanager#CreateGrant": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target":
    "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
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            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Creates a grant for the specified license. A grant shares the use of license\n        entitlements with a specific Amazon Web Services account, an organization, or an\n organizational unit (OU). For more
 information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
          }
        },
        "com.amazonaws.licensemanager#CreateGrantRequest": {
          "type": "structure",
          "members": {
            "ClientToken": {
              "target": "com.amazonaws.licensemanager#ClientToken",
              "traits": {
                "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
                "smithy.api#required": {}
              }
            },
            "GrantName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Grant name.</p>",
                "smithy.api#required": {}

        }
            },
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
              }
            },
            "Principals": {
```

```
            "target": "com.amazonaws.licensemanager#PrincipalArnList",
            "traits": {
              "smithy.api#documentation": "<p>The grant principals. You can specify one of the following as an Amazon Resource Name\n        (ARN):</p>\n        <ul>\n        <li>\n        <p>An Amazon Web Services account, which includes only the account specified.</p>\n        </li>\n        </ul>\n        <ul>\n        <li>\n    <p>An organizational unit (OU), which includes all accounts in the OU.</p>\n        </li>\n        </ul>\n        <ul>\n
        <li>\n        <p>An organization, which will include all accounts across your organization.</p>\n        </li>\n        </ul>",
              "smithy.api#required": {}
            }
          },
          "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Home Region of the grant.</p>",
              "smithy.api#required": {}
            }
          },
          "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed operations for the grant.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",

        "traits": {
              "smithy.api#documentation": "<p>Tags to add to the grant. For more information about tagging support in\n        License Manager, see the <a href=\"https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html\">TagResource</a> operation.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateGrantResponse": {
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
```

```
            },
            "Status": {
               "target": "com.amazonaws.licensemanager#GrantStatus",
               "traits": {
                  "smithy.api#documentation":
"<p>Grant status.</p>"
               }
            },
            "Version": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Grant version.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanager#CreateGrantVersion": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanager#CreateGrantVersionResponse"
         },
         "errors": [
            {
               "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
               "target": "com.amazonaws.licensemanager#AuthorizationException"
             },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
               "target": "com.amazonaws.licensemanager#ValidationException"
```

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            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Creates a new version of the specified grant. For more information, see\n          <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"

        }
      },
      "com.amazonaws.licensemanager#CreateGrantVersionRequest": {
        "type": "structure",
        "members": {
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          },
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          },
          "GrantName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

        "smithy.api#documentation": "<p>Grant name.</p>"
            }
          },
          "AllowedOperations": {
            "target": "com.amazonaws.licensemanager#AllowedOperationList",
            "traits": {
              "smithy.api#documentation": "<p>Allowed operations for the grant.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
              "smithy.api#documentation": "<p>Grant status.</p>"
            }
          },
          "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Grant status reason.</p>"
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the grant.</p>"
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#CreateGrantVersionResponse": {
    "type": "structure",
    "members": {
        "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Grant ARN.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanager#GrantStatus",
            "traits": {
                "smithy.api#documentation": "<p>Grant status.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>New version of the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#CreateLicense": {
```

```
    "type": "operation",
    "input": {
      "target": "com.amazonaws.licensemanager#CreateLicenseRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },

      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#RedirectException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {
      "smithy.api#documentation": "<p>Creates a license.</p>"
    }
  },
  "com.amazonaws.licensemanager#CreateLicenseConfiguration": {
    "type": "operation",
    "input": {

"target": "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
```

```
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }

        ],
          "traits": {
            "smithy.api#documentation": "<p>Creates a license configuration.</p>\n        <p>A license configuration is an abstraction of a customer license agreement that can be\n        consumed and enforced by License Manager. Components include specifications for the license\n        type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n        Dedicated Instance, Dedicated Host, or all of these), license affinity  to host (how long a \n        license must be associated with a host), and the number of licenses purchased and used.</p>"
          }
        },
        "com.amazonaws.licensemanager#CreateLicenseConfigurationRequest": {
          "type": "structure",
          "members": {
            "Name": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Name of the license configuration.</p>",
                 "smithy.api#required": {}
              }
            },
            "Description": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Description of the license configuration.</p>"
              }
            },
            "LicenseCountingType": {
              "target": "com.amazonaws.licensemanager#LicenseCountingType",
              "traits": {
                "smithy.api#documentation": "<p>Dimension used to track the license inventory.</p>",
                "smithy.api#required": {}
              }
```

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        },
        "LicenseCount": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"

  }
        },
        "LicenseCountHardLimit": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>Indicates whether hard or soft license enforcement is used.
Exceeding a hard limit\n        blocks the launch of new instances.</p>"
          }
        },
        "LicenseRules": {
          "target": "com.amazonaws.licensemanager#StringList",
          "traits": {
            "smithy.api#documentation": "<p>License rules. The syntax is #name=value (for example,
#allowedTenancy=EC2-DedicatedHost). The available rules \n        vary by dimension, as follows.</p>\n
<ul>\n          <li>\n            <p>\n              <code>Cores</code> dimension: <code>allowedTenancy</code> |\n
          <code>licenseAffinityToHost</code> |\n            <code>maximumCores</code> |
<code>minimumCores</code>\n
          </p>\n          </li>\n          <li>\n            <p>\n              <code>Instances</code> dimension:
<code>allowedTenancy</code> | \n            <code>maximumVpcus</code> | <code>minimumVpcus</code>\n
      </p>\n          </li>\n          <li>\n            <p>\n              <code>Sockets</code> dimension:
<code>allowedTenancy</code> | \n            <code>licenseAffinityToHost</code> |\n
<code>maximumSockets</code> | <code>minimumSockets</code>\n            </p>\n          </li>\n          <li>\n
        <p>\n              <code>vCPUs</code> dimension: <code>allowedTenancy</code> | \n
<code>honorVcpuOptimization</code> | \n            <code>maximumVcpus</code> |
<code>minimumVcpus</code>\n            </p>\n          </li>\n        </ul>\n        <p>The unit for
<code>licenseAffinityToHost</code> is days and the range is 1 to 180. The possible \n        values for
<code>allowedTenancy</code>
 are <code>EC2-Default</code>, <code>EC2-DedicatedHost</code>, and \n        <code>EC2-
DedicatedInstance</code>. The possible values for <code>honorVcpuOptimization</code> are \n
<code>True</code> and <code>False</code>.</p>"
          }
        },
        "Tags": {
          "target": "com.amazonaws.licensemanager#TagList",
          "traits": {
            "smithy.api#documentation": "<p>Tags to add to the license configuration.</p>"
          }
        },
        "DisassociateWhenNotFound": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>When true, disassociates a resource when software is
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uninstalled.</p>"
                }
            },
            "ProductInformationList": {
                "target": "com.amazonaws.licensemanager#ProductInformationList",
                 "traits": {
                    "smithy.api#documentation": "<p>Product information.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

```
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],

    "traits": {
            "smithy.api#documentation": "<p>Creates a new license conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource you are converting
the license type for.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting
from. \n\n         For the structure of the source license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert
 a license type using the CLI </a> in the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            },
            "DestinationLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information that identifies the license type you are converting to.
For the structure of the destination license, see <a href=\"https://docs.aws.amazon.com/license-
manager/latest/userguide/conversion-procedures.html#conversion-cli\">Convert a license type using the CLI </a> in
the <i>License Manager User Guide</i>.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
```

```
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseConversionTaskForResourceResponse": {
        "type": "structure",
        "members": {
          "LicenseConversionTaskId": {
            "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the created license type conversion task.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse"
        },
        "errors":
[
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
```

```
            "target": "com.amazonaws.licensemanager#ValidationException"
          }

    ],
      "traits": {
        "smithy.api#documentation": "<p>Creates a report generator.</p>"
      }
    },
    "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorRequest": {
      "type": "structure",
      "members": {
        "ReportGeneratorName": {
          "target": "com.amazonaws.licensemanager#ReportGeneratorName",
          "traits": {
            "smithy.api#documentation": "<p>Name of the report generator.</p>",
            "smithy.api#required": {}
          }
        },
        "Type": {
          "target": "com.amazonaws.licensemanager#ReportTypeList",
          "traits": {
            "smithy.api#documentation": "<p>Type of reports to generate. The following report types an be
generated:</p>\n        <ul>\n        <li>\n        <p>License configuration report - Reports the number and
details
 of consumed licenses for a license configuration.</p>\n        </li>\n        <li>\n        <p>Resource report -
Reports the tracked licenses and resource consumption for a license configuration.</p>\n        </li>\n        </ul>",
            "smithy.api#required": {}
          }
        },
        "ReportContext": {
          "target": "com.amazonaws.licensemanager#ReportContext",
          "traits": {
            "smithy.api#documentation": "<p>Defines the type of license configuration the report generator
tracks.</p>",
            "smithy.api#required": {}
          }
        },
        "ReportFrequency": {
          "target": "com.amazonaws.licensemanager#ReportFrequency",
          "traits": {
            "smithy.api#documentation": "<p>Frequency by which reports are generated.  Reports can be
generated daily, monthly, or
 weekly.</p>",
            "smithy.api#required": {}
          }
        },
        "ClientToken": {
          "target": "com.amazonaws.licensemanager#ClientRequestToken",
```

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            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>Tags to add to the report generator.</p>"

            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {
          "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the new report
generator.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseRequest": {
        "type": "structure",
        "members": {
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
 "<p>License name.</p>",
              "smithy.api#required": {}
```

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            }
          },
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product name.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductSKU": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product SKU.</p>",
              "smithy.api#required": {}
            }
          },
          "Issuer": {
            "target": "com.amazonaws.licensemanager#Issuer",
            "traits": {
              "smithy.api#documentation": "<p>License issuer.</p>",
              "smithy.api#required": {}

  }
          },
          "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Home Region for the license.</p>",
              "smithy.api#required": {}
            }
          },
          "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
              "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
              "smithy.api#required": {}
            }
          },
          "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
              "smithy.api#documentation": "<p>License entitlements.</p>",
              "smithy.api#required": {}

    }
          },
          "Beneficiary": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License beneficiary.</p>",
              "smithy.api#required": {}
            }
          },
          "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional configuration for workloads\n running with continuous connectivity. Choose a borrow configuration for workloads with offline\n usage.</p>",
              "smithy.api#required": {}
            }
          },
          "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",

   "traits": {
              "smithy.api#documentation": "<p>Information about the license.</p>"
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>Tags to add to the license. For more information about tagging support in\n License Manager, see the <a href=\"https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html\">TagResource</a> operation.</p>"
            }
          }

      },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseResponse": {
        "type": "structure",
        "members": {
          "LicenseArn": {
```

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            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
            "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License version.</p>"
            }
          }

        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseVersion": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#CreateLicenseVersionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#CreateLicenseVersionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#RedirectException"
          },
          {
```

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            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Creates a new version of the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#CreateLicenseVersionRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required":
{}
            }
          },
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product name.</p>",
              "smithy.api#required": {}
            }
          },
          "Issuer": {
            "target": "com.amazonaws.licensemanager#Issuer",
            "traits": {
              "smithy.api#documentation": "<p>License issuer.</p>",
              "smithy.api#required": {}
            }
          },
          "HomeRegion": {
```

```
  "target": "com.amazonaws.licensemanager#String",
                "traits": {
                  "smithy.api#documentation": "<p>Home Region of the license.</p>",
                  "smithy.api#required": {}
                }
              },
              "Validity": {
                "target": "com.amazonaws.licensemanager#DatetimeRange",
                "traits": {
                  "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>",
                  "smithy.api#required": {}
                }
              },
              "LicenseMetadata": {
                "target": "com.amazonaws.licensemanager#MetadataList",
                "traits": {
                  "smithy.api#documentation": "<p>Information about the license.</p>"
                }
              },
              "Entitlements": {
                "target": "com.amazonaws.licensemanager#EntitlementList",
                 "traits": {
                  "smithy.api#documentation": "<p>License entitlements.</p>",
                  "smithy.api#required": {}
                }
              },
              "ConsumptionConfiguration": {
                "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
                "traits": {
                  "smithy.api#documentation": "<p>Configuration for consumption of the license. Choose a provisional
configuration for workloads\n          running with continuous connectivity. Choose a borrow configuration for
workloads with offline\n          usage.</p>",
                  "smithy.api#required": {}
                }
              },
              "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                  "smithy.api#documentation": "<p>License status.</p>",

  "smithy.api#required": {}
                }
              },
              "ClientToken": {
                "target": "com.amazonaws.licensemanager#ClientToken",
                "traits": {
                  "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the
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idempotency of the request.</p>",
                    "smithy.api#required": {}
                }
            },
            "SourceVersion": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Current version of the license.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#CreateLicenseVersionResponse": {
        "type": "structure",
        "members": {
            "LicenseArn": {

    "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>License ARN.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>New version of the license.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseStatus",
                "traits": {
                    "smithy.api#documentation": "<p>License status.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#CreateToken": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#CreateTokenRequest"
         },
        "output": {
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            "target": "com.amazonaws.licensemanager#CreateTokenResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"

           },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Creates a long-lived token.</p>\n          <p>A refresh token is a JWT token used to get an access token. With an access token,\n          you can call AssumeRoleWithWebIdentity to get role credentials that you can use to \n          call License Manager to manage the specified license.</p>"
          }
        },
        "com.amazonaws.licensemanager#CreateTokenRequest": {
          "type": "structure",
          "members": {
            "LicenseArn": {
              "target": "com.amazonaws.licensemanager#Arn",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license. The ARN is mapped to the aud claim of the\n          JWT token.</p>",
                "smithy.api#required":
 {}
              }
            },
            "RoleArns": {
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            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the IAM roles to embed in the
token. \n        License Manager does not check whether the roles are in use.</p>"
            }
          },
          "ExpirationInDays": {
            "target": "com.amazonaws.licensemanager#Integer",
            "traits": {
              "smithy.api#documentation": "<p>Token expiration, in days, counted from token creation. The
default is 365 days.</p>"
            }
          },
          "TokenProperties": {
            "target": "com.amazonaws.licensemanager#MaxSize3StringList",
            "traits": {
              "smithy.api#documentation": "<p>Data specified by the caller to be included in the JWT
 token. The data is mapped\n          to the amr claim of the JWT token.</p>"
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientToken",
            "traits": {
              "smithy.api#documentation": "<p>Idempotency token, valid for 10 minutes.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#CreateTokenResponse": {
        "type": "structure",
        "members": {
          "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token ID.</p>"
            }
          },
          "TokenType": {
            "target": "com.amazonaws.licensemanager#TokenType",
             "traits": {
              "smithy.api#documentation": "<p>Token type.</p>"
            }
          },
          "Token": {
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            "target": "com.amazonaws.licensemanager#TokenString",
            "traits": {
              "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DateTime": {
        "type": "timestamp"
      },
      "com.amazonaws.licensemanager#DatetimeRange": {
        "type": "structure",
        "members": {
          "Begin": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Start of the time range.</p>",
              "smithy.api#required":
{}
            }
          },
          "End": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
              "smithy.api#documentation": "<p>End of the time range.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes a time range, in ISO8601-UTC format.</p>"
        }
      },
      "com.amazonaws.licensemanager#DeleteGrant": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#DeleteGrantRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteGrantResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
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            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes the specified grant.</p>"
        }
      },
      "com.amazonaws.licensemanager#DeleteGrantRequest": {
        "type": "structure",
        "members": {
          "GrantArn": {

       "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          },
          "StatusReason": {
            "target": "com.amazonaws.licensemanager#StatusReasonMessage",
            "traits": {
              "smithy.api#documentation": "<p>The Status reason for the delete request.</p>"
            }
          },
          "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Current version of the grant.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
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            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteGrantResponse":
{
        "type": "structure",
        "members": {
            "GrantArn": {
                "target": "com.amazonaws.licensemanager#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>Grant ARN.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#GrantStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Grant status.</p>"
                }
            },
            "Version": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Grant version.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicense":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#DeleteLicenseResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#ConflictException"
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        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#RedirectException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Deletes the specified license.</p>"
      }
    },
    "com.amazonaws.licensemanager#DeleteLicenseConfiguration": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Deletes the specified license configuration.</p>\n        <p>You cannot
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delete a license configuration that is in use.</p>"
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the license
 configuration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#DeleteLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {

           "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified report generator.</p>\n          <p>This action deletes
 the report generator, which stops it from generating future reports.\n          The action cannot be reversed. It has no effect on the previous reports from this generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to be deleted.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseManagerReportGeneratorResponse": {
        "type": "structure",
        "members": {},
        "traits": {

          "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
```

```
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
                "smithy.api#required": {}
            }
        },
        "SourceVersion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Current version of the license.</p>",
                "smithy.api#required": {}
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#DeleteLicenseResponse": {

 "type": "structure",
    "members": {
        "Status": {
            "target": "com.amazonaws.licensemanager#LicenseDeletionStatus",
            "traits": {
                "smithy.api#documentation": "<p>License status.</p>"
            }
        },
        "DeletionDate": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Date when the license is deleted.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#DeleteToken": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#DeleteTokenRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#DeleteTokenResponse"
     },
    "errors": [
```

```
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#RedirectException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deletes the specified token.
Must be called in the license home Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenRequest": {
        "type": "structure",
        "members": {
            "TokenId": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token ID.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#DeleteTokenResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
```

```
    },
    "com.amazonaws.licensemanager#DigitalSignatureMethod": {
      "type": "enum",
      "members": {
        "JWT_PS384": {
          "target": "smithy.api#Unit",

          "traits": {
            "smithy.api#enumValue": "JWT_PS384"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#Entitlement": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Entitlement name.</p>",
            "smithy.api#required": {}
          }
        },
        "Value": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Entitlement resource. Use only if the unit is None.</p>"
          }
        },
        "MaxCount": {
          "target": "com.amazonaws.licensemanager#Long",
          "traits": {
            "smithy.api#documentation":
"<p>Maximum entitlement count. Use if the unit is not None.</p>"
          }
        },
        "Overage": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>Indicates whether overages are allowed.</p>"
          }
        },
        "Unit": {
          "target": "com.amazonaws.licensemanager#EntitlementUnit",
          "traits": {
            "smithy.api#documentation": "<p>Entitlement unit.</p>",
            "smithy.api#required": {}
          }
```

```
        },
        "AllowCheckIn": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>Indicates whether check-ins are allowed.</p>"
          }
        }

    },
    "traits": {
      "smithy.api#documentation": "<p>Describes a resource entitled for use with a license.</p>"
    }
  },
  "com.amazonaws.licensemanager#EntitlementData": {
    "type": "structure",
    "members": {
      "Name": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Entitlement data name.</p>",
          "smithy.api#required": {}
        }
      },
      "Value": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Entitlement data value.</p>"
        }
      },
      "Unit": {
        "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
        "traits": {

"smithy.api#documentation": "<p>Entitlement data unit.</p>",
          "smithy.api#required": {}
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Data associated with an entitlement resource.</p>"
    }
  },
  "com.amazonaws.licensemanager#EntitlementDataList": {
    "type": "list",
    "member": {
      "target": "com.amazonaws.licensemanager#EntitlementData"
    }
  },
```

```
    "com.amazonaws.licensemanager#EntitlementDataUnit": {
      "type": "enum",
      "members": {
        "COUNT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Count"
          }
        },
        "NONE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue":
"None"
          }
        },
        "SECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Seconds"
          }
        },
        "MICROSECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Microseconds"
          }
        },
        "MILLISECONDS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Milliseconds"
          }
        },
        "BYTES": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Bytes"
          }
        },
        "KILOBYTES": {
          "target": "smithy.api#Unit",

    "traits": {
            "smithy.api#enumValue": "Kilobytes"
          }
        },
        "MEGABYTES": {
```

```
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Megabytes"
        }
      },
      "GIGABYTES": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Gigabytes"
        }
      },
      "TERABYTES": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Terabytes"
        }
      },
      "BITS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Bits"
        }
      },
      "KILOBITS": {

    "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Kilobits"
        }
      },
      "MEGABITS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Megabits"
        }
      },
      "GIGABITS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Gigabits"
        }
      },
      "TERABITS": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Terabits"
        }
      },
```

```
            "PERCENT": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Percent"
                }

            },
            "BYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Bytes/Second"
                }
            },
            "KILOBYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobytes/Second"
                }
            },
            "MEGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Megabytes/Second"
                }
            },
            "GIGABYTES_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Gigabytes/Second"
                }
            },
            "TERABYTES_PER_SECOND": {
                "target":
"smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Terabytes/Second"
                }
            },
            "BITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Bits/Second"
                }
            },
            "KILOBITS_PER_SECOND": {
                "target": "smithy.api#Unit",
                "traits": {
                    "smithy.api#enumValue": "Kilobits/Second"
```

```
            }
          },
          "MEGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Megabits/Second"
            }
          },
          "GIGABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue":
"Gigabits/Second"
            }
          },
          "TERABITS_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Terabits/Second"
            }
          },
          "COUNT_PER_SECOND": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Count/Second"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#EntitlementList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Entitlement"
        }
      },
      "com.amazonaws.licensemanager#EntitlementNotAllowedException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }

       },
        "traits": {
          "smithy.api#documentation": "<p>The entitlement is not allowed.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
```

```
},
"com.amazonaws.licensemanager#EntitlementUnit": {
    "type": "enum",
    "members": {
        "COUNT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Count"
            }
        },
        "NONE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "None"
            }
        },
        "SECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Seconds"
            }
        },
        "MICROSECONDS": {

          "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Microseconds"
            }
        },
        "MILLISECONDS": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Milliseconds"
            }
        },
        "BYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Bytes"
            }
        },
        "KILOBYTES": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "Kilobytes"
            }
        },
        "MEGABYTES": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Megabytes"

        }
          },
          "GIGABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Gigabytes"
            }
          },
          "TERABYTES": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Terabytes"
            }
          },
          "BITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Bits"
            }
          },
          "KILOBITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Kilobits"
            }
          },
          "MEGABITS": {
            "target": "smithy.api#Unit",
            "traits": {

    "smithy.api#enumValue": "Megabits"
            }
          },
          "GIGABITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Gigabits"
            }
          },
          "TERABITS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Terabits"
            }
```

```
            },
            "PERCENT": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Percent"
              }
            },
            "BYTES_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Bytes/Second"
              }
            },
            "KILOBYTES_PER_SECOND": {
              "target":
"smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Kilobytes/Second"
              }
            },
            "MEGABYTES_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Megabytes/Second"
              }
            },
            "GIGABYTES_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Gigabytes/Second"
              }
            },
            "TERABYTES_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
                "smithy.api#enumValue": "Terabytes/Second"
              }
            },
            "BITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {

  "smithy.api#enumValue": "Bits/Second"
              }
            },
            "KILOBITS_PER_SECOND": {
              "target": "smithy.api#Unit",
              "traits": {
```

```
            "smithy.api#enumValue": "Kilobits/Second"
          }
        },
        "MEGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Megabits/Second"
          }
        },
        "GIGABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Gigabits/Second"
          }
        },
        "TERABITS_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Terabits/Second"
          }
        },

        "COUNT_PER_SECOND": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Count/Second"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#EntitlementUsage": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Entitlement usage name.</p>",
            "smithy.api#required": {}
          }
        },
        "ConsumedValue": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Resource usage consumed.</p>",
            "smithy.api#required": {}
          }
        },
        "MaxCount":
```

```
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Maximum entitlement usage count.</p>"
            }
          },
          "Unit": {
            "target": "com.amazonaws.licensemanager#EntitlementDataUnit",
            "traits": {
              "smithy.api#documentation": "<p>Entitlement usage unit.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Usage associated with an entitlement resource.</p>"
        }
      },
      "com.amazonaws.licensemanager#EntitlementUsageList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#EntitlementUsage"
        }
      },
      "com.amazonaws.licensemanager#ExtendLicenseConsumption":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
```

```
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Extends the expiration date for license consumption.</p>"
      }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionRequest": {
      "type": "structure",
      "members": {
        "LicenseConsumptionToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License consumption token.</p>",
            "smithy.api#required": {}
          }
        },
        "DryRun": {
          "target": "com.amazonaws.licensemanager#Boolean",
          "traits": {
            "smithy.api#default": false,

          "smithy.api#documentation": "<p>Checks whether you have the required permissions for the action,
without actually making the request. Provides an error response if you do not have the required permissions.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ExtendLicenseConsumptionResponse": {
      "type": "structure",
      "members": {
        "LicenseConsumptionToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License consumption token.</p>"
          }
        },
        "Expiration": {
          "target": "com.amazonaws.licensemanager#ISO8601DateTime",
          "traits": {
```

```
                "smithy.api#documentation": "<p>Date and time at which the
license consumption expires.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#FailedDependencyException": {
        "type": "structure",
        "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            },
            "ErrorCode": {
                "target": "com.amazonaws.licensemanager#String"
            }
        },
        "traits": {
            "aws.protocols#awsQueryError": {
                "code": "FailedDependency",
                "httpResponseCode": 424
            },
            "smithy.api#documentation": "<p>A dependency required to run the API is missing.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 424
        }
    },
    "com.amazonaws.licensemanager#Filter":
{
        "type": "structure",
        "members": {
            "Name": {
                "target": "com.amazonaws.licensemanager#FilterName",
                "traits": {
                    "smithy.api#documentation": "<p>Name of the filter. Filter names are case-sensitive.</p>"
                }
            },
            "Values": {
                "target": "com.amazonaws.licensemanager#FilterValues",
                "traits": {
                    "smithy.api#documentation": "<p>The value of the filter, which is case-sensitive. You can only
specify one value for the filter.</p>"
                }
            }
        },
        "traits": {
```

```
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a\n          describe operation. Filters can be used to match a set of resources by specific criteria,\n          such as tags, attributes, or IDs.</p>"

        }
      },
      "com.amazonaws.licensemanager#FilterLimitExceededException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "FilterLimitExceeded",
            "httpResponseCode": 400
          },
          "smithy.api#documentation": "<p>The request uses too many filters or too many filter values.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },
      "com.amazonaws.licensemanager#FilterList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Filter"
        }
      },
      "com.amazonaws.licensemanager#FilterName": {
        "type": "string"
      },
      "com.amazonaws.licensemanager#FilterValue":
{
        "type": "string"
      },
      "com.amazonaws.licensemanager#FilterValues": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#FilterValue",
          "traits": {
            "smithy.api#xmlName": "item"
          }
        }
      },
      "com.amazonaws.licensemanager#Filters": {
        "type": "list",
        "member": {
```

```
            "target": "com.amazonaws.licensemanager#Filter",
            "traits": {
              "smithy.api#xmlName": "item"
            }
          }
        },
        "com.amazonaws.licensemanager#GetAccessToken": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#GetAccessTokenRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#GetAccessTokenResponse"
          },

    "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Gets a temporary access token to use with
AssumeRoleWithWebIdentity. Access tokens\n          are valid for one hour.</p>"
          }
        },
        "com.amazonaws.licensemanager#GetAccessTokenRequest": {
          "type": "structure",
          "members": {
            "Token":
{
              "target": "com.amazonaws.licensemanager#TokenString",
              "traits": {
                "smithy.api#documentation": "<p>Refresh token, encoded as a JWT token.</p>",
                "smithy.api#required": {}
              }
            },
```

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        "TokenProperties": {
          "target": "com.amazonaws.licensemanager#MaxSize3StringList",
          "traits": {
            "smithy.api#documentation": "<p>Token properties to validate against those present in the JWT token.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetAccessTokenResponse": {
      "type": "structure",
      "members": {
        "AccessToken": {
          "target": "com.amazonaws.licensemanager#TokenString",
          "traits": {

           "smithy.api#documentation": "<p>Temporary access token.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#GetGrant": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#GetGrantRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#GetGrantResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
```

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        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Gets detailed information about the specified grant.</p>"
      }
    },
    "com.amazonaws.licensemanager#GetGrantRequest": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant version.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#GetGrantResponse": {
      "type": "structure",
      "members": {
        "Grant": {
          "target": "com.amazonaws.licensemanager#Grant",
          "traits": {
            "smithy.api#documentation": "<p>Grant details.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
```

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        }
      },
      "com.amazonaws.licensemanager#GetLicense": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetLicenseRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanager#GetLicenseResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Gets detailed
information about the specified license.</p>"
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConfiguration": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetLicenseConfigurationRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#GetLicenseConfigurationResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
```

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            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Gets detailed information about the specified license
configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
          "LicenseConfigurationId":
{
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Unique ID for the license configuration.</p>"
            }
          },
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
            }
```

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        },
        "Name": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the license configuration.</p>"
          }
        },
        "Description": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation":
"<p>Description of the license configuration.</p>"
          }
        },
        "LicenseCountingType": {
          "target": "com.amazonaws.licensemanager#LicenseCountingType",
          "traits": {
            "smithy.api#documentation": "<p>Dimension for which the licenses are counted.</p>"
          }
        },
        "LicenseRules": {
          "target": "com.amazonaws.licensemanager#StringList",
          "traits": {
            "smithy.api#documentation": "<p>License rules.</p>"
          }
        },
        "LicenseCount": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of available licenses.</p>"
          }
        },
        "LicenseCountHardLimit": {

 "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>Sets the number of available licenses as a hard limit.</p>"
          }
        },
        "ConsumedLicenses": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of licenses assigned to resources.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
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                "smithy.api#documentation": "<p>License configuration status.</p>"
            }
        },
        "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Account ID of the owner
 of the license configuration.</p>"
            }
        },
        "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries of the licenses consumed by resources.</p>"
            }
        },
        "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
            "traits": {
                "smithy.api#documentation": "<p>Summaries of the managed resources.</p>"
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
                "smithy.api#documentation": "<p>Tags for the license configuration.</p>"
            }
        },
        "ProductInformationList":
 {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
                "smithy.api#documentation": "<p>Product information.</p>"
            }
        },
        "AutomatedDiscoveryInformation": {
            "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
            "traits": {
                "smithy.api#documentation": "<p>Automated discovery information.</p>"
            }
        },
        "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
                "smithy.api#documentation": "<p>When true, disassociates a resource when software is
 uninstalled.</p>"
            }
        }
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        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTask":
{
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
         "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskRequest": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
                    "smithy.api#documentation": "<p>ID of the license type conversion task to retrieve information
on.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
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            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseConversionTaskResponse": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                 "traits": {
                    "smithy.api#documentation": "<p>ID of the license type conversion task.</p>"
                }
            },
            "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the resources the license
conversion task is associated with.</p>"
                }
            },
            "SourceLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                "traits": {
                    "smithy.api#documentation": "<p>Information about the license type converted from.</p>"
                }
            },
            "DestinationLicenseContext": {
                "target": "com.amazonaws.licensemanager#LicenseConversionContext",
                 "traits": {
                    "smithy.api#documentation": "<p>Information about the license type converted to.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
                "traits": {
                    "smithy.api#documentation": "<p>Status of the license type conversion task.</p>"
                }
            },
            "StartTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task
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 was started .</p>"
                }
            },
            "LicenseConversionTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Amount of time to complete the license type conversion.</p>"
                }
            },
            "EndTime": {
                "target": "com.amazonaws.licensemanager#DateTime",
                "traits": {
                    "smithy.api#documentation": "<p>Time at which the license type conversion task was
completed.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest"

  },
        "output": {
            "target": "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
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            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Gets information about the specified report generator.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
            "LicenseManagerReportGeneratorArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseManagerReportGeneratorResponse":
{
        "type": "structure",
        "members": {
            "ReportGenerator": {
                "target": "com.amazonaws.licensemanager#ReportGenerator",
                "traits": {
                    "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#GetLicenseRequest": {
        "type": "structure",
        "members": {
            "LicenseArn": {
                "target": "com.amazonaws.licensemanager#Arn",
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            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          },
          "Version": {
            "target":
"com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License version.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseResponse": {
        "type": "structure",
        "members": {
          "License": {
            "target": "com.amazonaws.licensemanager#License",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseUsage": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#GetLicenseUsageRequest"
        },
        "output":
{
          "target": "com.amazonaws.licensemanager#GetLicenseUsageResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
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```
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Gets detailed information about the usage of the specified
license.</p>"
        }
      },
      "com.amazonaws.licensemanager#GetLicenseUsageRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#GetLicenseUsageResponse": {
        "type": "structure",
        "members": {
          "LicenseUsage": {
            "target": "com.amazonaws.licensemanager#LicenseUsage",
            "traits": {
              "smithy.api#documentation": "<p>License usage details.</p>"
            }
          }
        },
         "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#GetServiceSettings": {
        "type": "operation",
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        "input": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#GetServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation":
"<p>Gets the License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Regional S3 bucket path for storing reports, license trail event data,
discovery data,\n        and so on.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>SNS topic configured
to receive notifications from License Manager.</p>"
                }
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        },
        "OrganizationConfiguration": {
          "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
          "traits": {
            "smithy.api#documentation": "<p>Indicates whether Organizations is integrated with License
Manager for\n        cross-account discovery.</p>"
          }
        },
        "EnableCrossAccountsDiscovery": {
          "target": "com.amazonaws.licensemanager#BoxBoolean",
          "traits": {
            "smithy.api#documentation": "<p>Indicates whether cross-account discovery is enabled.</p>"
          }
        },
        "LicenseManagerResourceShareArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon
 Resource Name (ARN) of the resource share. The License Manager management account \n        provides member
accounts with access to this share.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#Grant": {
      "type": "structure",
      "members": {
        "GrantArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
            "smithy.api#required": {}
          }
        },
        "GrantName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Grant name.</p>",
            "smithy.api#required": {}

  }
        },
        "ParentArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
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            "smithy.api#documentation": "<p>Parent ARN.</p>",
            "smithy.api#required": {}
          }
        },
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>License ARN.</p>",
            "smithy.api#required": {}
          }
        },
        "GranteePrincipalArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The grantee principal ARN.</p>",
            "smithy.api#required": {}
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
           "traits": {
            "smithy.api#documentation": "<p>Home Region of the grant.</p>",
            "smithy.api#required": {}
          }
        },
        "GrantStatus": {
          "target": "com.amazonaws.licensemanager#GrantStatus",
          "traits": {
            "smithy.api#documentation": "<p>Grant status.</p>",
            "smithy.api#required": {}
          }
        },
        "StatusReason": {
          "target": "com.amazonaws.licensemanager#StatusReasonMessage",
          "traits": {
            "smithy.api#documentation": "<p>Grant status reason.</p>"
          }
        },
        "Version": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation":
"<p>Grant version.</p>",
            "smithy.api#required": {}
          }
        },
        "GrantedOperations": {
          "target": "com.amazonaws.licensemanager#AllowedOperationList",
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            "traits": {
                "smithy.api#documentation": "<p>Granted operations.</p>",
                "smithy.api#required": {}
            }
        },
        "Options": {
            "target": "com.amazonaws.licensemanager#Options",
            "traits": {
                "smithy.api#documentation": "<p>The options specified for the grant.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a grant.</p>"
    }
},
"com.amazonaws.licensemanager#GrantList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#Grant"
     }
},
"com.amazonaws.licensemanager#GrantStatus": {
    "type": "enum",
    "members": {
        "PENDING_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_WORKFLOW"
            }
        },
        "PENDING_ACCEPT": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "PENDING_ACCEPT"
            }
        },
        "REJECTED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "REJECTED"
            }
        },
        "ACTIVE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "ACTIVE"
            }
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        },
        "FAILED_WORKFLOW": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "FAILED_WORKFLOW"
          }
        },
        "DELETED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DELETED"
          }
        },
        "PENDING_DELETE": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "PENDING_DELETE"
          }
        },
        "DISABLED": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DISABLED"
          }
        },
        "WORKFLOW_COMPLETED": {
          "target": "smithy.api#Unit",
          "traits":
{
            "smithy.api#enumValue": "WORKFLOW_COMPLETED"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#GrantedLicense": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
          }
        },
        "LicenseName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>License name.</p>"
          }
```

```
        },
        "ProductName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product name.</p>"

      }
        },
        "ProductSKU": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Product SKU.</p>"
          }
        },
        "Issuer": {
          "target": "com.amazonaws.licensemanager#IssuerDetails",
          "traits": {
            "smithy.api#documentation": "<p>Granted license issuer.</p>"
          }
        },
        "HomeRegion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Home Region of the granted license.</p>"
          }
        },
        "Status": {
          "target": "com.amazonaws.licensemanager#LicenseStatus",
          "traits": {
            "smithy.api#documentation":
"<p>Granted license status.</p>"
          }
        },
        "Validity": {
          "target": "com.amazonaws.licensemanager#DatetimeRange",
          "traits": {
            "smithy.api#documentation": "<p>Date and time range during which the granted license is valid, in
ISO8601-UTC format.</p>"
          }
        },
        "Beneficiary": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Granted license beneficiary.</p>"
          }
        },
        "Entitlements": {
          "target": "com.amazonaws.licensemanager#EntitlementList",
```

```
            "traits": {
                "smithy.api#documentation": "<p>License entitlements.</p>"
            }
        },
        "ConsumptionConfiguration": {

"target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
                "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
        },
        "LicenseMetadata": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>Granted license metadata.</p>"
            }
        },
        "CreateTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits": {
                "smithy.api#documentation": "<p>Creation time of the granted license.</p>"
            }
        },
        "Version": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Version of the
granted license.</p>"
            }
        },
        "ReceivedMetadata": {
            "target": "com.amazonaws.licensemanager#ReceivedMetadata",
            "traits": {
                "smithy.api#documentation": "<p>Granted license received metadata.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Describes a license that is granted to a grantee.</p>"
    }
},
"com.amazonaws.licensemanager#GrantedLicenseList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#GrantedLicense"
    }
},
"com.amazonaws.licensemanager#ISO8601DateTime": {
```

```
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#pattern": "^(-?(?:[1-9][0-9]*)?[0-9]{4})-(1[0-2]|0[1-9])-(3[0-1]|0[1-9]|[1-2][0-9])T(2[0-3]|[0-
1][0-9]):([0-5][0-9]):([0-5][0-9])(\\.[0-9]+)?(Z|[+-](?:2[
0-3]|[0-1][0-9]):[0-5][0-9])+$"
        }
      },
      "com.amazonaws.licensemanager#Integer": {
        "type": "integer"
      },
      "com.amazonaws.licensemanager#InvalidParameterValueException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "InvalidParameterValueProvided",
            "httpResponseCode": 400
          },
          "smithy.api#documentation": "<p>One or more parameter values are not valid.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },
      "com.amazonaws.licensemanager#InvalidResourceStateException":
{
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "InvalidResourceState",
            "httpResponseCode": 400
          },
          "smithy.api#documentation": "<p>License Manager cannot allocate a license to a resource because of its
state. </p>\n          <p>For example, you cannot allocate a license to an instance in the process of shutting\n
down.</p>",
          "smithy.api#error": "client",
```

```
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#InventoryFilter": {
      "type": "structure",
      "members": {
        "Name": {
          "target": "com.amazonaws.licensemanager#String",

"traits": {
            "smithy.api#documentation": "<p>Name of the filter.</p>",
            "smithy.api#required": {}
          }
        },
        "Condition": {
          "target": "com.amazonaws.licensemanager#InventoryFilterCondition",
          "traits": {
            "smithy.api#documentation": "<p>Condition of the filter.</p>",
            "smithy.api#required": {}
          }
        },
        "Value": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Value of the filter.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>An inventory filter.</p>"
      }
    },
    "com.amazonaws.licensemanager#InventoryFilterCondition": {
      "type": "enum",
       "members": {
        "EQUALS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "EQUALS"
          }
        },
        "NOT_EQUALS": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "NOT_EQUALS"
          }
        },
        "BEGINS_WITH": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "BEGINS_WITH"
            }
          },
          "CONTAINS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "CONTAINS"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#InventoryFilterList": {
        "type": "list",

  "member": {
          "target": "com.amazonaws.licensemanager#InventoryFilter"
        }
      },
      "com.amazonaws.licensemanager#Issuer": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Issuer name.</p>",
              "smithy.api#required": {}
            }
          },
          "SignKey": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage of sign and verify, \n          and support the RSASSA-PSS SHA-256 signing
algorithm.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details
 about the issuer of a license.</p>"
        }
      },
      "com.amazonaws.licensemanager#IssuerDetails": {
        "type": "structure",
        "members": {
          "Name": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Issuer name.</p>"
            }
          },
          "SignKey": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Asymmetric KMS key from Key Management Service. The KMS
key must have a key usage of sign and verify, \n        and support the RSASSA-PSS SHA-256 signing
algorithm.</p>"
            }
          },
          "KeyFingerprint": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
 "<p>Issuer key fingerprint.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details associated with the issuer of a license.</p>"
        }
      },
      "com.amazonaws.licensemanager#License": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "LicenseName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License name.</p>"
            }
          },
          "ProductName": {
            "target": "com.amazonaws.licensemanager#String",

    "traits": {
              "smithy.api#documentation": "<p>Product name.</p>"
            }
          },
          "ProductSKU": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Product SKU.</p>"
            }
          },
          "Issuer": {
            "target": "com.amazonaws.licensemanager#IssuerDetails",
            "traits": {
              "smithy.api#documentation": "<p>License issuer.</p>"
            }
          },
          "HomeRegion": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Home Region of the license.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#LicenseStatus",
             "traits": {
              "smithy.api#documentation": "<p>License status.</p>"
            }
          },
          "Validity": {
            "target": "com.amazonaws.licensemanager#DatetimeRange",
            "traits": {
              "smithy.api#documentation": "<p>Date and time range during which the license is valid, in ISO8601-
UTC format.</p>"
            }
          },
          "Beneficiary": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>License beneficiary.</p>"
            }
          },
          "Entitlements": {
            "target": "com.amazonaws.licensemanager#EntitlementList",
            "traits": {
              "smithy.api#documentation": "<p>License entitlements.</p>"
            }
          },

        "ConsumptionConfiguration": {
            "target": "com.amazonaws.licensemanager#ConsumptionConfiguration",
            "traits": {
              "smithy.api#documentation": "<p>Configuration for consumption of the license.</p>"
            }
```

```
            },
            "LicenseMetadata": {
               "target": "com.amazonaws.licensemanager#MetadataList",
               "traits": {
                  "smithy.api#documentation": "<p>License metadata.</p>"
               }
            },
            "CreateTime": {
               "target": "com.amazonaws.licensemanager#ISO8601DateTime",
               "traits": {
                  "smithy.api#documentation": "<p>License creation time.</p>"
               }
            },
            "Version": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation":
"<p>License version.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Software license that is managed in License Manager.</p>"
         }
      },
      "com.amazonaws.licensemanager#LicenseConfiguration": {
         "type": "structure",
         "members": {
            "LicenseConfigurationId": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Unique ID of the license configuration.</p>"
               }
            },
            "LicenseConfigurationArn": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>"
               }
            },
            "Name": {

             "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Name of the license configuration.</p>"
               }
            },
            "Description": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the license configuration.</p>"
            }
          },
          "LicenseCountingType": {
            "target": "com.amazonaws.licensemanager#LicenseCountingType",
            "traits": {
              "smithy.api#documentation": "<p>Dimension to use to track the license inventory.</p>"
            }
          },
          "LicenseRules": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
              "smithy.api#documentation":
 "<p>License rules.</p>"
            }
          },
          "LicenseCount": {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses managed by the license configuration.</p>"
            }
          },
          "LicenseCountHardLimit": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>Number of available licenses as a hard limit.</p>"
            }
          },
          "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>When true, disassociates a resource when software is
uninstalled.</p>"
            }
          },
          "ConsumedLicenses":
 {
            "target": "com.amazonaws.licensemanager#BoxLong",
            "traits": {
              "smithy.api#documentation": "<p>Number of licenses consumed. </p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Status of the license configuration.</p>"
```

```
            }
          },
          "OwnerAccountId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Account ID of the license configuration's owner.</p>"
            }
          },
          "ConsumedLicenseSummaryList": {
            "target": "com.amazonaws.licensemanager#ConsumedLicenseSummaryList",
            "traits": {

    "smithy.api#documentation": "<p>Summaries for licenses consumed by various resources.</p>"
            }
          },
          "ManagedResourceSummaryList": {
            "target": "com.amazonaws.licensemanager#ManagedResourceSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Summaries for managed resources.</p>"
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>Product information.</p>"
            }
          },
          "AutomatedDiscoveryInformation": {
            "target": "com.amazonaws.licensemanager#AutomatedDiscoveryInformation",
            "traits": {
              "smithy.api#documentation": "<p>Automated discovery information.</p>"

           }
           }
        },
        "traits": {
          "smithy.api#documentation": "<p>A license configuration is an abstraction of a customer license agreement that can be\n consumed and enforced by License Manager. Components include specifications for the license\n type (licensing by instance, socket, CPU, or vCPU), allowed tenancy (shared tenancy, \n Dedicated Instance, Dedicated Host, or all of these), host affinity (how long a VM\n must be associated with a host), and the number of licenses purchased and used.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationAssociation": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"

        }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Type of server resource.</p>"
            }
          },
          "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the resource consuming licenses.</p>"
            }
          },
          "AssociationTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time when the license configuration was associated with the resource.</p>"
            }
          },
          "AmiAssociationScope": {
            "target":
 "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-account</code>.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an association with a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationAssociations": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociation"
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationStatus": {
        "type": "enum",
        "members": {
          "AVAILABLE": {
```

```
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "AVAILABLE"
            }
          },

          "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISABLED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseConfigurationUsage": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
            }
          },
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#ResourceType",
            "traits": {
              "smithy.api#documentation": "<p>Type of resource.</p>"
            }
          },
          "ResourceStatus": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
              "smithy.api#documentation": "<p>Status of the resource.</p>"
            }
          },
          "ResourceOwnerId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
            }
          },
          "AssociationTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>Time when the license configuration was initially associated with
the resource.</p>"
            }
          },
```

```
            "ConsumedLicenses": {
                "target": "com.amazonaws.licensemanager#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>Number of licenses consumed by the resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Details about the usage of a resource associated with a license configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurationUsageList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationUsage"
        }
    },
    "com.amazonaws.licensemanager#LicenseConfigurations": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#LicenseConfiguration"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionContext": {
        "type": "structure",
        "members": {
            "UsageOperation": {
                "target": "com.amazonaws.licensemanager#UsageOperation",
                "traits": {
                    "smithy.api#documentation":
 "<p>The Usage operation value that corresponds to the license type you are converting your resource from.  For more information about which platforms correspond to which usage operation values see <a href=\"https://docs.aws.amazon.com/AWSEC2/latest/UserGuide/billing-info-fields.html#billing-info\">Sample data: usage operation by platform\n      </a>\n        </p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
    },
    "com.amazonaws.licensemanager#LicenseConversionTask": {
        "type": "structure",
        "members": {
            "LicenseConversionTaskId": {
                "target": "com.amazonaws.licensemanager#LicenseConversionTaskId",
                "traits": {
```

```
                "smithy.api#documentation": "<p>The ID of the license type conversion task.</p>"

        }
            },
            "ResourceArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource associated
with the license type\n        conversion task.</p>"
              }
            },
            "SourceLicenseContext": {
              "target": "com.amazonaws.licensemanager#LicenseConversionContext",
              "traits": {
                "smithy.api#documentation": "<p>Information about the license type this conversion task converted
from.</p>"
              }
            },
            "DestinationLicenseContext": {
              "target": "com.amazonaws.licensemanager#LicenseConversionContext",
              "traits": {
                "smithy.api#documentation": "<p>Information about the license type this conversion task converted
to.</p>"
               }
            },
            "Status": {
              "target": "com.amazonaws.licensemanager#LicenseConversionTaskStatus",
              "traits": {
                "smithy.api#documentation": "<p>The status of the conversion task.</p>"
              }
            },
            "StatusMessage": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>The status message for the conversion task.</p>"
              }
            },
            "StartTime": {
              "target": "com.amazonaws.licensemanager#DateTime",
              "traits": {
                "smithy.api#documentation": "<p>The time the conversion task was started at.</p>"
              }
            },
            "LicenseConversionTime": {
              "target": "com.amazonaws.licensemanager#DateTime",
               "traits": {
                "smithy.api#documentation": "<p>The time the usage operation value of the resource was
changed.</p>"
```

```
            }
          },
          "EndTime": {
            "target": "com.amazonaws.licensemanager#DateTime",
            "traits": {
              "smithy.api#documentation": "<p>The time the conversion task was completed.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Information about a license type conversion task.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTaskId": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 50
          },
          "smithy.api#pattern": "^lct-[a-zA-Z0-9]*$"
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTaskStatus":
{
        "type": "enum",
        "members": {
          "IN_PROGRESS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "IN_PROGRESS"
            }
          },
          "SUCCEEDED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "SUCCEEDED"
            }
          },
          "FAILED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseConversionTasks": {
```

```
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTask"
        }
      },
      "com.amazonaws.licensemanager#LicenseCountingType":
{
        "type": "enum",
        "members": {
          "VCPU": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "vCPU"
            }
          },
          "INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Instance"
            }
          },
          "CORE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Core"
            }
          },
          "SOCKET": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "Socket"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseDeletionStatus":
{
        "type": "enum",
        "members": {
          "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "PENDING_DELETE"
            }
          },
          "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
```

```
                "smithy.api#enumValue": "DELETED"
              }
            }
          }
        },
        "com.amazonaws.licensemanager#LicenseList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanager#License"
          }
        },
        "com.amazonaws.licensemanager#LicenseOperationFailure": {
          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation":
"<p>Amazon Resource Name (ARN) of the resource.</p>"
              }
            },
            "ResourceType": {
              "target": "com.amazonaws.licensemanager#ResourceType",
              "traits": {
                "smithy.api#documentation": "<p>Resource type.</p>"
              }
            },
            "ErrorMessage": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Error message.</p>"
              }
            },
            "FailureTime": {
              "target": "com.amazonaws.licensemanager#DateTime",
              "traits": {
                "smithy.api#documentation": "<p>Failure time.</p>"
              }
            },
            "OperationName": {
              "target": "com.amazonaws.licensemanager#String",
              "traits":
{
                "smithy.api#documentation": "<p>Name of the operation.</p>"
              }
            },
            "ResourceOwnerId": {
              "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>ID of the Amazon Web Services account that owns the
resource.</p>"
            }
        },
        "OperationRequestedBy": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The requester is \"License Manager Automated Discovery\".</p>"
            }
        },
        "MetadataList": {
            "target": "com.amazonaws.licensemanager#MetadataList",
            "traits": {
                "smithy.api#documentation": "<p>Reserved.</p>"
            }
        }

    },
    "traits": {
        "smithy.api#documentation": "<p>Describes the failure of a license operation.</p>"
    }
  },
  "com.amazonaws.licensemanager#LicenseOperationFailureList": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseOperationFailure"
    }
  },
  "com.amazonaws.licensemanager#LicenseSpecification": {
    "type": "structure",
    "members": {
        "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                "smithy.api#required": {}
            }
        },
        "AmiAssociationScope": {
            "target": "com.amazonaws.licensemanager#String",
            "traits":
{
                "smithy.api#documentation": "<p>Scope of AMI associations. The possible value is <code>cross-
account</code>.</p>"
            }
        }
```

```
    },
    "traits": {
        "smithy.api#documentation": "<p>Details for associating a license configuration with a resource.</p>"
    }
},
"com.amazonaws.licensemanager#LicenseSpecifications": {
    "type": "list",
    "member": {
        "target": "com.amazonaws.licensemanager#LicenseSpecification"
    }
},
"com.amazonaws.licensemanager#LicenseStatus": {
    "type": "enum",
    "members": {
        "AVAILABLE": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "AVAILABLE"
            }
        },
        "PENDING_AVAILABLE": {
            "target": "smithy.api#Unit",

     "traits": {
                "smithy.api#enumValue": "PENDING_AVAILABLE"
            }
        },
        "DEACTIVATED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "DEACTIVATED"
            }
        },
        "SUSPENDED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "SUSPENDED"
            }
        },
        "EXPIRED": {
            "target": "smithy.api#Unit",
            "traits": {
                "smithy.api#enumValue": "EXPIRED"
            }
        },
        "PENDING_DELETE": {
            "target": "smithy.api#Unit",
            "traits": {
```

```
                "smithy.api#enumValue": "PENDING_DELETE"
            }
          },

         "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#LicenseUsage": {
        "type": "structure",
        "members": {
          "EntitlementUsages": {
            "target": "com.amazonaws.licensemanager#EntitlementUsageList",
            "traits": {
              "smithy.api#documentation": "<p>License entitlement usages.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes the entitlement usage associated with a license.</p>"
        }
      },
      "com.amazonaws.licensemanager#LicenseUsageException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
           }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "LicenseUsageFailure",
            "httpResponseCode": 412
          },
          "smithy.api#documentation": "<p>You do not have enough licenses available to support a new resource
launch.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 412
        }
      },
      "com.amazonaws.licensemanager#ListAssociationsForLicenseConfiguration": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest"
```

```
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
             },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the resource associations for the specified license
configuration.</p>\n        <p>Resource associations need not consume licenses from a license configuration. \n
For example, an AMI or a stopped instance might not consume a license (depending
 on \n        the license rules).</p>"
        }
    },
    "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
```

```
            "target": "com.amazonaws.licensemanager#String",
            "traits": {

          "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListAssociationsForLicenseConfigurationResponse": {
        "type": "structure",
        "members": {
          "LicenseConfigurationAssociations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurationAssociations",
            "traits": {
              "smithy.api#documentation": "<p>Information about the associations for the license
configuration.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }

      },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListDistributedGrants": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListDistributedGrantsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListDistributedGrantsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
```

```
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {

  "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the grants distributed for the specified license.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListDistributedGrantsRequest": {
          "type": "structure",
          "members": {
            "GrantArns": {
              "target": "com.amazonaws.licensemanager#ArnList",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
              }
            },
            "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
               "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>LicenseArn</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>GrantStatus</code>\n            </p>\n          </li>\n
  <li>\n            <p>\n              <code>GranteePrincipalARN</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n          <li>\n
<p>\n              <code>LicenseIssuerName</code>\n            </p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                 "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
```

```
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#ListDistributedGrantsResponse": {
    "type": "structure",
    "members": {
        "Grants": {
            "target": "com.amazonaws.licensemanager#GrantList",
            "traits": {
                "smithy.api#documentation": "<p>Distributed grant details.</p>"
            }
        },
        "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
```

```
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the license configuration operations that failed.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsRequest": {
        "type": "structure",
        "members": {
          "LicenseConfigurationArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name of the license configuration.</p>",
              "smithy.api#required": {}

        }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListFailuresForLicenseConfigurationOperationsResponse": {
        "type": "structure",
        "members": {
          "LicenseOperationFailureList": {
            "target": "com.amazonaws.licensemanager#LicenseOperationFailureList",
```

```
  "traits": {
            "smithy.api#documentation": "<p>License configuration operations that failed.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurations": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
         },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the license configurations for your account.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListLicenseConfigurationsRequest": {
```

```
        "type": "structure",
        "members": {
          "LicenseConfigurationArns":
{
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the license
configurations.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#Filters",
            "traits": {
              "smithy.api#documentation":
 "<p>Filters to scope the results. The following filters and logical operators\n        are supported:</p>\n        <ul>\n
      <li>\n              <p>\n                <code>licenseCountingType</code> - The dimension for which licenses are
counted.\n              Possible values are <code>vCPU</code> | <code>Instance</code> | <code>Core</code> |
<code>Socket</code>.</p>\n          </li>\n          <li>\n              <p>\n
<code>enforceLicenseCount</code> - A Boolean value that indicates whether hard license enforcement is
used.</p>\n          </li>\n          <li>\n              <p>\n                <code>usagelimitExceeded</code> - A Boolean
value that indicates whether the available licenses have been exceeded.</p>\n          </li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConfigurationsResponse":
{
        "type": "structure",
        "members": {
          "LicenseConfigurations": {
            "target": "com.amazonaws.licensemanager#LicenseConfigurations",
            "traits": {
              "smithy.api#documentation": "<p>Information about the license configurations.</p>"
```

```
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConversionTasks": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the license type conversion tasks for your account.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListLicenseConversionTasksRequest":
{
        "type": "structure",
        "members": {
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
        },
        "MaxResults": {
            "target": "com.amazonaws.licensemanager#BoxInteger",
            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
        },
        "Filters": {
            "target": "com.amazonaws.licensemanager#Filters",
            "traits": {
                "smithy.api#documentation": "<p>\n         Filters to scope the results. Valid filters are
<code>ResourceArns</code> and <code>Status</code>.\n      </p>"
            }

    }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenseConversionTasksResponse": {
      "type": "structure",
      "members": {
        "LicenseConversionTasks": {
          "target": "com.amazonaws.licensemanager#LicenseConversionTasks",
          "traits": {
            "smithy.api#documentation": "<p>Information about the license configuration tasks for your
account.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenseManagerReportGenerators":
{
      "type": "operation",
      "input": {
```

```
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the report generators for your account.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsRequest": {
          "type": "structure",
          "members": {
            "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are supported:
</p>\n        <ul>\n          <li>\n            <p>\n              <code>LicenseConfigurationArn</code>\n
            </p>\n          </li>\n        </ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseManagerReportGeneratorsResponse": {
        "type": "structure",
        "members": {
          "ReportGenerators": {
            "target": "com.amazonaws.licensemanager#ReportGeneratorList",
             "traits": {
              "smithy.api#documentation": "<p>A report generator that creates periodic reports about your license
configurations.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseSpecificationsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse"
         },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Describes the license configurations for the specified resource.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceRequest": {
        "type": "structure",
        "members": {

        "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of a resource that has an
associated license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },
            "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input":
 {}
        }
    },
    "com.amazonaws.licensemanager#ListLicenseSpecificationsForResourceResponse": {
```

```
        "type": "structure",
        "members": {
          "LicenseSpecifications": {
            "target": "com.amazonaws.licensemanager#LicenseSpecifications",
            "traits": {
              "smithy.api#documentation": "<p>License configurations associated with a resource.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicenseVersions": {
        "type": "operation",
        "input": {
          "target":
"com.amazonaws.licensemanager#ListLicenseVersionsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListLicenseVersionsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists all versions of the specified license.</p>"
        }
```

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},
    "com.amazonaws.licensemanager#ListLicenseVersionsRequest": {
      "type": "structure",
      "members": {
        "LicenseArn": {
          "target": "com.amazonaws.licensemanager#Arn",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>",
            "smithy.api#required": {}
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
         }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListLicenseVersionsResponse": {
      "type": "structure",
      "members": {
        "Licenses": {
          "target": "com.amazonaws.licensemanager#LicenseList",
          "traits": {
            "smithy.api#documentation": "<p>License details.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
```

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  },
  "com.amazonaws.licensemanager#ListLicenses": {
    "type": "operation",
    "input": {

"target": "com.amazonaws.licensemanager#ListLicensesRequest"
    },
    "output": {
      "target": "com.amazonaws.licensemanager#ListLicensesResponse"
    },
    "errors": [
      {
        "target": "com.amazonaws.licensemanager#AccessDeniedException"
      },
      {
        "target": "com.amazonaws.licensemanager#AuthorizationException"
      },
      {
        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
      },
      {
        "target": "com.amazonaws.licensemanager#RateLimitExceededException"
      },
      {
        "target": "com.amazonaws.licensemanager#ServerInternalException"
      },
      {
        "target": "com.amazonaws.licensemanager#ValidationException"
      }
    ],
    "traits": {

   "smithy.api#documentation": "<p>Lists the licenses for your account.</p>"
    }
  },
  "com.amazonaws.licensemanager#ListLicensesRequest": {
    "type": "structure",
    "members": {
      "LicenseArns": {
        "target": "com.amazonaws.licensemanager#ArnList",
        "traits": {
          "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
        }
      },
      "Filters": {
        "target": "com.amazonaws.licensemanager#FilterList",
        "traits": {
          "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
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supported:</p>\n <ul>\n <li>\n <p>\n <code>Beneficiary</code>\n </p>\n
</li>\n <li>\n <p>\n <code>ProductSKU</code>\n
</p>\n </li>\n <li>\n <p>\n <code>Fingerprint</code>\n </p>\n
</li>\n <li>\n <p>\n <code>Status</code>\n </p>\n </li>\n </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanager#MaxSize100",
            "traits": {
              "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListLicensesResponse":
{
        "type": "structure",
        "members": {
          "Licenses": {
            "target": "com.amazonaws.licensemanager#LicenseList",
            "traits": {
              "smithy.api#documentation": "<p>License details.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrants": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListReceivedGrantsRequest"
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        },
        "output": {
            "target":
"com.amazonaws.licensemanager#ListReceivedGrantsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
                "target": "com.amazonaws.licensemanager#ValidationException"
            }
        ],
        "traits":
{
            "smithy.api#documentation": "<p>Lists grants that are received. Received grants are grants created while
specifying the\n        recipient as this Amazon Web Services account, your organization, or an organizational unit\n
    (OU) to which this member account belongs.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganization": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
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            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {

        "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the grants received for all accounts in the organization.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationRequest": {
        "type": "structure",
        "members": {
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#Arn",
             "traits": {
               "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the received license.</p>",
               "smithy.api#required": {}
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ParentArn</code>\n            </p>\n
    </li>\n          <li>\n            <p>\n              <code>GranteePrincipalArn</code>\n            </p>\n
</li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
 "<p>Token for the next set of results.</p>"
            }
```

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        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
          "traits": {
            "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsForOrganizationResponse": {
      "type": "structure",
      "members": {
        "Grants": {
          "target": "com.amazonaws.licensemanager#GrantList",
          "traits": {
            "smithy.api#documentation": "<p>Lists the grants the organization has received.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedGrantsRequest": {
      "type": "structure",
      "members": {
        "GrantArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the grants.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n
          <p>\n            <code>ProductSKU</code>\n          </p>\n        </li>\n        <li>\n          <p>\n
           <code>LicenseIssuerName</code>\n          </p>\n        </li>\n        <li>\n          <p>\n
```

<code>LicenseArn</code>\n \n \n \n \n
<code>GrantStatus</code>\n \n \n \n \n
<code>GranterAccountId</code>\n \n \n "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
},
"MaxResults": {
"target": "com.amazonaws.licensemanager#MaxSize100",
"traits": {
"smithy.api#documentation": " Maximum number of results to return in a single call. "
}
}
},
"traits": {
"smithy.api#input": {}
}
},
"com.amazonaws.licensemanager#ListReceivedGrantsResponse": {
"type": "structure",
"members": {
"Grants": {
"target": "com.amazonaws.licensemanager#GrantList",
"traits": {
"smithy.api#documentation": " Received grant details. "
}
},
"NextToken": {
"target": "com.amazonaws.licensemanager#String",
"traits": {
"smithy.api#documentation": " Token for the next set of results. "
}
}
},

"traits": {
"smithy.api#output": {}
}
},
"com.amazonaws.licensemanager#ListReceivedLicenses": {
"type": "operation",
"input": {
"target": "com.amazonaws.licensemanager#ListReceivedLicensesRequest"
},

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      "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
         },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        },
        {
          "target": "com.amazonaws.licensemanager#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists received licenses.</p>"
      }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganization": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },

{
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

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            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            },
            {
              "target": "com.amazonaws.licensemanager#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Lists the licenses received for all accounts in the organization.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationRequest": {

         "type": "structure",
          "members": {
            "Filters": {
              "target": "com.amazonaws.licensemanager#FilterList",
              "traits": {
                "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n
      </li>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n          </li>\n
</ul>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
               "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
```

```
    "com.amazonaws.licensemanager#ListReceivedLicensesForOrganizationResponse": {
      "type": "structure",
      "members": {
        "Licenses": {
          "target": "com.amazonaws.licensemanager#GrantedLicenseList",
          "traits": {
            "smithy.api#documentation": "<p>Lists the licenses the organization has received.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesRequest": {
      "type": "structure",
      "members": {
        "LicenseArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Names (ARNs) of the licenses.</p>"
          }
        },
        "Filters": {
          "target": "com.amazonaws.licensemanager#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>Filters to scope the results. The following filters are
supported:</p>\n        <ul>\n          <li>\n            <p>\n              <code>ProductSKU</code>\n            </p>\n
        </li>\n          <li>\n            <p>\n              <code>Status</code>\n
      </p>\n          </li>\n          <li>\n            <p>\n              <code>Fingerprint</code>\n            </p>\n
 </li>\n          <li>\n            <p>\n              <code>IssuerName</code>\n            </p>\n          </li>\n
<li>\n            <p>\n              <code>Beneficiary</code>\n            </p>\n          </li>\n        </ul>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanager#MaxSize100",
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            "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
            }

        }
      },
      "traits": {
        "smithy.api#input": {}
      }
    },
    "com.amazonaws.licensemanager#ListReceivedLicensesResponse": {
      "type": "structure",
      "members": {
        "Licenses": {
          "target": "com.amazonaws.licensemanager#GrantedLicenseList",
          "traits": {
            "smithy.api#documentation": "<p>Received license details.</p>"
          }
        },
        "NextToken": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Token for the next set of results.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanager#ListResourceInventory": {
      "type": "operation",
      "input":
{
        "target": "com.amazonaws.licensemanager#ListResourceInventoryRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#ListResourceInventoryResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#FailedDependencyException"
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            },
            {
               "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
               "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
               "target": "com.amazonaws.licensemanager#RateLimitExceededException"

   },
            {
               "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
         ],
         "traits": {
            "smithy.api#documentation": "<p>Lists resources managed using Systems Manager inventory.</p>"
         }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryRequest": {
         "type": "structure",
         "members": {
            "MaxResults": {
               "target": "com.amazonaws.licensemanager#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
               }
            },
            "NextToken": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Token for the next set of results.</p>"
               }
            },

         "Filters": {
               "target": "com.amazonaws.licensemanager#InventoryFilterList",
               "traits": {
                  "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n            <li>\n                <p>\n                    <code>account_id</code>
- The ID of the Amazon Web Services account that owns the resource.\n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n            </li>\n            <li>\n                <p>\n
    <code>application_name</code> - The name of the application. \n                Logical operators are
<code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n            </li>\n            <li>\n                <p>\n
    <code>license_included</code> - The type of license included. \n                Logical operators are
<code>EQUALS</code> | <code>NOT_EQUALS</code>.\n
            Possible values are <code>sql-server-enterprise</code> | \n                <code>sql-server-standard</code> |
\n            <code>sql-server-web</code> |  \n                <code>windows-server-datacenter</code>.</p>\n
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</li>\n <li>\n <p>\n <code>platform</code> - The platform of the resource.\n Logical operators are <code>EQUALS</code> | <code>BEGINS_WITH</code>.</p>\n </li>\n <li>\n <p>\n <code>resource_id</code> - The ID of the resource. \n Logical operators are <code>EQUALS</code> | <code>NOT_EQUALS</code>.</p>\n </li>\n <li>\n <p>\n <code>tag:<key></code> - The key/value combination of a tag assigned \n to the resource. Logical operators are <code>EQUALS</code> (single account) or\n <code>EQUALS</code> | <code>NOT_EQUALS</code> (cross account).</p>\n
    </li>\n </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#ListResourceInventoryResponse": {
        "type": "structure",
        "members": {
          "ResourceInventoryList": {
            "target": "com.amazonaws.licensemanager#ResourceInventoryList",
            "traits": {
              "smithy.api#documentation": "<p>Information about the resources.</p>"
            }
          },
          "NextToken": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token for the next set of results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#ListTagsForResource":
{
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListTagsForResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
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            {
              "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
              "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {

    "smithy.api#documentation": "<p>Lists the tags for the specified resource. For more information about tagging support in\n          License Manager, see the <a href=\"https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html\">TagResource</a> operation.</p>"
          }
        },
        "com.amazonaws.licensemanager#ListTagsForResourceRequest": {
          "type": "structure",
          "members": {
            "ResourceArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListTagsForResourceResponse": {
          "type": "structure",
          "members":
{
            "Tags": {
              "target": "com.amazonaws.licensemanager#TagList",
              "traits": {
                "smithy.api#documentation": "<p>Information about the tags.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
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        }
      },
      "com.amazonaws.licensemanager#ListTokens": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#ListTokensRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#ListTokensResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
           },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists your tokens.</p>"
        }
      },
      "com.amazonaws.licensemanager#ListTokensRequest": {
        "type": "structure",
        "members": {
          "TokenIds": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
              "smithy.api#documentation": "<p>Token IDs.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanager#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>Filters
 to scope the results. The following filter is supported:</p>\n        <ul>\n        <li>\n        <p>\n
<code>LicenseArns</code>\n        </p>\n        </li>\n        </ul>"
            }
          },
```

```
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            },
            "MaxResults": {
              "target": "com.amazonaws.licensemanager#MaxSize100",
              "traits": {
                "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanager#ListTokensResponse": {
          "type":
    "structure",
          "members": {
            "Tokens": {
              "target": "com.amazonaws.licensemanager#TokenList",
              "traits": {
                "smithy.api#documentation": "<p>Received token details.</p>"
              }
            },
            "NextToken": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Token for the next set of results.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanager#ListUsageForLicenseConfiguration": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse"
           },
          "errors": [
            {
```

```
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#FilterLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists all license usage records for a license configuration, displaying license\n consumption
 details by resource at a selected point in time. Use this action to audit the\n current license consumption for any license inventory and configuration.</p>"
        }
    },
    "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationRequest": {
        "type": "structure",
        "members": {
            "LicenseConfigurationArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanager#BoxInteger",
                "traits": {
                    "smithy.api#documentation": "<p>Maximum number of results to return in a single call.</p>"
                }
            },

     "NextToken": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Token for the next set of results.</p>"
                }
```

```
            },
            "Filters": {
               "target": "com.amazonaws.licensemanager#Filters",
               "traits": {
                  "smithy.api#documentation": "<p>Filters to scope the results. The following filters and logical
operators\n        are supported:</p>\n        <ul>\n        <li>\n        <p>\n
<code>resourceArn</code> - The ARN of the license configuration resource.</p>\n        </li>\n        <li>\n
    <p>\n        <code>resourceType</code> - The resource type (<code>EC2_INSTANCE</code> | \n
\t<code>EC2_HOST</code> | <code>EC2_AMI</code> |
<code>SYSTEMS_MANAGER_MANAGED_INSTANCE</code>).</p>\n        </li>\n        <li>\n
            <p>\n        <code>resourceAccount</code> - The ID of the account that owns the resource.</p>\n
    </li>\n        </ul>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanager#ListUsageForLicenseConfigurationResponse": {
         "type": "structure",
         "members": {
            "LicenseConfigurationUsageList": {
               "target": "com.amazonaws.licensemanager#LicenseConfigurationUsageList",
               "traits": {
                  "smithy.api#documentation": "<p>Information about the license configurations.</p>"
               }
            },
            "NextToken": {
               "target": "com.amazonaws.licensemanager#String",
               "traits": {
                  "smithy.api#documentation": "<p>Token for the next set of results.</p>"

             }
             }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanager#Location": {
         "type": "string"
      },
      "com.amazonaws.licensemanager#Long": {
         "type": "long"
      },
      "com.amazonaws.licensemanager#ManagedResourceSummary": {
         "type": "structure",
```

```
      "members": {
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Type of resource associated with a license.</p>"
          }
        },
        "AssociationCount": {
          "target": "com.amazonaws.licensemanager#BoxLong",
          "traits": {
            "smithy.api#documentation": "<p>Number of resources associated with licenses.</p>"
          }

    }
      },
      "traits": {
        "smithy.api#documentation": "<p>Summary information about a managed resource.</p>"
      }
    },
    "com.amazonaws.licensemanager#ManagedResourceSummaryList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ManagedResourceSummary"
      }
    },
    "com.amazonaws.licensemanager#MaxSize100": {
      "type": "integer",
      "traits": {
        "smithy.api#range": {
          "min": 1,
          "max": 100
        }
      }
    },
    "com.amazonaws.licensemanager#MaxSize3StringList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#String"
      },
      "traits": {
        "smithy.api#length": {
          "min": 0,
          "max": 3
        }
      }

  },
    "com.amazonaws.licensemanager#Message": {
```

```
        "type": "string"
      },
      "com.amazonaws.licensemanager#Metadata": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The key name.</p>"
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes key/value pairs.</p>"
        }
      },
      "com.amazonaws.licensemanager#MetadataList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Metadata"
        }
      },
      "com.amazonaws.licensemanager#NoEntitlementsAllowedException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>There are no entitlements found for this license, or the entitlement
maximum count is reached.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 400
        }
      },
      "com.amazonaws.licensemanager#Options": {
        "type": "structure",
        "members": {
          "ActivationOverrideBehavior": {
            "target": "com.amazonaws.licensemanager#ActivationOverrideBehavior",
            "traits": {
```

```
            "smithy.api#documentation": "<p>An activation option for your grant that determines the behavior of activating a grant.\n
        Activation options can only be used with granted licenses sourced from the Amazon Web Services Marketplace. Additionally, the operation must specify the value of <code>ACTIVE</code> for the\n <code>Status</code> parameter.</p>\n <ul>\n <li>\n <p>As a license administrator, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when activating a grant.</p>\n </li>\n <li>\n <p>As a grantor, you can optionally specify an\n <code>ActivationOverrideBehavior</code> when you activate a grant for a grantee\n account in your organization.</p>\n </li>\n <li>\n <p>As a grantee, if the grantor creating the distributed grant doesnt specify an\n <code>ActivationOverrideBehavior</code>, you can optionally specify one when you\n are activating the grant.</p>\n </li>\n
    </ul>\n <dl>\n <dt>DISTRIBUTED_GRANTS_ONLY</dt>\n <dd>\n <p>Use this value to activate a grant without replacing any member accounts\n active grants for the same product.</p>\n </dd>\n <dt>ALL_GRANTS_PERMITTED_BY_ISSUER</dt>\n <dd>\n
   <p>Use this value to activate a grant and disable other active grants in any\n member accounts for the same product. This action will also replace their\n previously activated grants with this activated grant.</p>\n </dd>\n </dl>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The options you can specify when you create a new version of a grant, such as activation\n override behavior. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/granted-licenses.html\">Granted
 licenses in License Manager</a> in the <i>License Manager User Guide</i>.</p>"
        }
    },
    "com.amazonaws.licensemanager#OrganizationConfiguration": {
        "type": "structure",
        "members": {
            "EnableIntegration": {
                "target": "com.amazonaws.licensemanager#Boolean",
                "traits": {
                    "smithy.api#default": false,
                    "smithy.api#documentation": "<p>Enables Organizations integration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Configuration information for Organizations.</p>"
        }
    },
    "com.amazonaws.licensemanager#PrincipalArnList": {
        "type": "list",
        "member": {
            "target": "com.amazonaws.licensemanager#Arn"
        },
```

```
        "traits": {

      "smithy.api#length": {
            "min": 1,
            "max": 1
          }
        }
      },
      "com.amazonaws.licensemanager#ProductInformation": {
        "type": "structure",
        "members": {
          "ResourceType": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Resource type. The possible values are
<code>SSM_MANAGED</code> | <code>RDS</code>.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductInformationFilterList": {
            "target": "com.amazonaws.licensemanager#ProductInformationFilterList",
            "traits": {
              "smithy.api#documentation": "<p>A Product information filter consists of a
<code>ProductInformationFilterComparator</code> which is a logical operator, a
<code>ProductInformationFilterName</code>
 which specifies the type of filter being declared, and a <code>ProductInformationFilterValue</code> that specifies
the value to filter on. </p>\n          <p>Accepted values for <code>ProductInformationFilterName</code> are listed
here along with descriptions and valid options for <code>ProductInformationFilterComparator</code>. </p>\n
<p>The following filters and are supported when the resource type \n          is
<code>SSM_MANAGED</code>:</p>\n          <ul>\n          <li>\n          <p>\n          <code>Application
Name</code> - The name of the application.\n          Logical operator is <code>EQUALS</code>.</p>\n
</li>\n          <li>\n          <p>\n          <code>Application Publisher</code> - The publisher of the
application.\n          Logical operator is <code>EQUALS</code>.</p>\n          </li>\n          <li>\n
<p>\n          <code>Application Version</code> - The version of the
 application.\n          Logical operator is <code>EQUALS</code>.</p>\n          </li>\n          <li>\n
<p>\n          <code>Platform Name</code> - The name of the platform.\n          Logical operator is
<code>EQUALS</code>.</p>\n          </li>\n          <li>\n          <p>\n          <code>Platform
Type</code> - The platform type.\n          Logical operator is <code>EQUALS</code>.</p>\n          </li>\n
  <li>\n          <p>\n          <code>Tag:key</code> - The key of a tag attached to an Amazon Web Services
resource you wish to exclude from automated discovery. Logical operator is <code>NOT_EQUALS</code>.  The
key for your tag must be appended to <code>Tag:</code> following the example: <code>Tag:name-of-your-
key</code>. <code>ProductInformationFilterValue</code> is optional if you are not using values for the key.\n
    </p>\n          </li>\n          <li>\n          <p>\n
          <code>AccountId</code> - The 12-digit ID of an Amazon Web Services account you wish to exclude
from automated discovery.\n          Logical operator is <code>NOT_EQUALS</code>.</p>\n          </li>\n
  <li>\n          <p>\n          <code>License Included</code> - The type of license included.\n          Logical
operators are <code>EQUALS</code> and <code>NOT_EQUALS</code>.\n          Possible values are:
<code>sql-server-enterprise</code> | \n          <code>sql-server-standard</code> | \n          <code>sql-server-
```

```
web</code> | \n <code>windows-server-datacenter</code>.</p>\n </li>\n </ul>\n
<p>The following filters and logical operators are supported when the resource type\n is
<code>RDS</code>:</p>\n <ul>\n <li>\n <p>\n <code>Engine Edition</code> -
The edition of the database engine.\n Logical operator is <code>EQUALS</code>.\n
Possible values are: <code>oracle-ee</code> | <code>oracle-se</code> | <code>oracle-se1</code> |
<code>oracle-se2</code> \n \t| <code>db2-se</code> | <code>db2-ae</code>.</p>\n </li>\n
<li>\n <p>\n <code>License Pack</code> - The license pack.\n Logical operator is
<code>EQUALS</code>.\n Possible values are: <code>data guard</code> | \n <code>diagnostic
pack sqlt</code> | \n <code>tuning pack sqlt</code> | \n <code>ols</code> | \n
<code>olap</code>.</p>\n </li>\n </ul>",
                "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes product information for a license configuration.</p>"
        }
      },
      "com.amazonaws.licensemanager#ProductInformationFilter":
{
        "type": "structure",
        "members": {
          "ProductInformationFilterName": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Filter name.</p>",
              "smithy.api#required": {}
            }
          },
          "ProductInformationFilterValue": {
            "target": "com.amazonaws.licensemanager#StringList",
            "traits": {
              "smithy.api#documentation": "<p>Filter value.</p>"
            }
          },
          "ProductInformationFilterComparator": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Logical operator.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes product information filters.</p>"
        }
      },
      "com.amazonaws.licensemanager#ProductInformationFilterList": {
```

```
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ProductInformationFilter"
      }
    },
    "com.amazonaws.licensemanager#ProductInformationList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ProductInformation"
      }
    },
    "com.amazonaws.licensemanager#ProvisionalConfiguration": {
      "type": "structure",
      "members": {
        "MaxTimeToLiveInMinutes": {
          "target": "com.amazonaws.licensemanager#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>Maximum time for the provisional configuration, in minutes.</p>",

      "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about a provisional configuration.</p>"
      }
    },
    "com.amazonaws.licensemanager#RateLimitExceededException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "aws.protocols#awsQueryError": {
          "code": "RateLimitExceeded",
          "httpResponseCode": 429
        },
        "smithy.api#documentation": "<p>Too many requests have been submitted. Try again after a brief
wait.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 429
      }
    },
    "com.amazonaws.licensemanager#ReceivedMetadata": {
      "type": "structure",
```

```
    "members": {
      "ReceivedStatus": {
        "target": "com.amazonaws.licensemanager#ReceivedStatus",
        "traits": {
          "smithy.api#documentation": "<p>Received status.</p>"
        }
      },
      "ReceivedStatusReason": {
        "target": "com.amazonaws.licensemanager#StatusReasonMessage",
        "traits": {
          "smithy.api#documentation": "<p>Received status reason.</p>"
        }
      },
      "AllowedOperations": {
        "target": "com.amazonaws.licensemanager#AllowedOperationList",
        "traits": {
          "smithy.api#documentation": "<p>Allowed operations.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#documentation": "<p>Metadata associated with received licenses and grants.</p>"
    }
  },
  "com.amazonaws.licensemanager#ReceivedStatus": {
    "type": "enum",
    "members": {
      "PENDING_WORKFLOW": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PENDING_WORKFLOW"
        }
      },
      "PENDING_ACCEPT": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "PENDING_ACCEPT"
        }
      },
      "REJECTED": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "REJECTED"
        }
      },
      "ACTIVE": {
        "target": "smithy.api#Unit",
        "traits": {
```

```
                "smithy.api#enumValue": "ACTIVE"
              }

},
          "FAILED_WORKFLOW": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "FAILED_WORKFLOW"
            }
          },
          "DELETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DELETED"
            }
          },
          "DISABLED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "DISABLED"
            }
          },
          "WORKFLOW_COMPLETED": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "WORKFLOW_COMPLETED"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#RedirectException": {
        "type": "structure",

        "members": {
          "Location": {
            "target": "com.amazonaws.licensemanager#Location",
            "traits": {
              "smithy.api#httpHeader": "Location"
            }
          },
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>This is not the correct Region for the resource. Try again.</p>",
          "smithy.api#error": "client",
          "smithy.api#httpError": 308
```

```
        }
      },
      "com.amazonaws.licensemanager#RejectGrant": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#RejectGrantRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#RejectGrantResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Rejects the specified grant.</p>"
        }
      },
      "com.amazonaws.licensemanager#RejectGrantRequest":
{
        "type": "structure",
        "members": {
          "GrantArn": {
            "target": "com.amazonaws.licensemanager#Arn",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the grant.</p>",
              "smithy.api#required": {}
            }
          }
```

```
    },
    "traits": {
      "smithy.api#input": {}
    }
  },
  "com.amazonaws.licensemanager#RejectGrantResponse": {
    "type": "structure",
    "members": {
      "GrantArn": {
        "target": "com.amazonaws.licensemanager#Arn",
        "traits": {
          "smithy.api#documentation": "<p>Grant ARN.</p>"
        }
      },
      "Status": {
        "target": "com.amazonaws.licensemanager#GrantStatus",

        "traits": {
          "smithy.api#documentation": "<p>Grant status.</p>"
        }
      },
      "Version": {
        "target": "com.amazonaws.licensemanager#String",
        "traits": {
          "smithy.api#documentation": "<p>Grant version.</p>"
        }
      }
    },
    "traits": {
      "smithy.api#output": {}
    }
  },
  "com.amazonaws.licensemanager#RenewType": {
    "type": "enum",
    "members": {
      "NONE": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "None"
        }
      },
      "WEEKLY": {
        "target": "smithy.api#Unit",
        "traits": {
          "smithy.api#enumValue": "Weekly"
        }
```

```
    },
        "MONTHLY": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "Monthly"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#ReportContext": {
      "type": "structure",
      "members": {
        "licenseConfigurationArns": {
          "target": "com.amazonaws.licensemanager#ArnList",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license configuration that
this generator reports on.</p>",
            "smithy.api#required": {}
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details of the license configuration that this generator reports on.</p>"
      }
    },
    "com.amazonaws.licensemanager#ReportFrequency": {

 "type": "structure",
      "members": {
        "value": {
          "target": "com.amazonaws.licensemanager#Integer",
          "traits": {
            "smithy.api#documentation": "<p>Number of times within the frequency period that a report is
generated.  \n        The only supported value is <code>1</code>.</p>"
          }
        },
        "period": {
          "target": "com.amazonaws.licensemanager#ReportFrequencyType",
          "traits": {
            "smithy.api#documentation": "<p>Time period between each report. The period can be daily, weekly,
or monthly.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
      }
    },
```

```
    "com.amazonaws.licensemanager#ReportFrequencyType": {
      "type": "enum",
      "members":
{
        "DAY": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "DAY"
          }
        },
        "WEEK": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "WEEK"
          }
        },
        "MONTH": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "MONTH"
          }
        }
      }
    },
    "com.amazonaws.licensemanager#ReportGenerator": {
      "type": "structure",
      "members": {
        "ReportGeneratorName": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Name of the report generator.</p>"

         }
        },
        "ReportType": {
          "target": "com.amazonaws.licensemanager#ReportTypeList",
          "traits": {
            "smithy.api#documentation": "<p>Type of reports that are generated.</p>"
          }
        },
        "ReportContext": {
          "target": "com.amazonaws.licensemanager#ReportContext",
          "traits": {
            "smithy.api#documentation": "<p>License configuration type for this generator.</p>"
          }
        },
        "ReportFrequency": {
          "target": "com.amazonaws.licensemanager#ReportFrequency",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Details about how frequently reports are generated.</p>"
            }
        },
        "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
             "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator.</p>"
            }
        },
        "LastRunStatus": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Status of the last report generation attempt.</p>"
            }
        },
        "LastRunFailureReason": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Failure message for the last report generation attempt.</p>"
            }
        },
        "LastReportGenerationTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Time
 the last report was generated at.</p>"
            }
        },
        "ReportCreatorAccount": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>The Amazon Web Services account ID used to create the report
generator.</p>"
            }
        },
        "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
                "smithy.api#documentation": "<p>Description of the report generator.</p>"
            }
        },
        "S3Location": {
            "target": "com.amazonaws.licensemanager#S3Location",
            "traits": {
                "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
            }
```

```
        },

    "CreateTime": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Time the report was created.</p>"
            }
        },
        "Tags": {
            "target": "com.amazonaws.licensemanager#TagList",
            "traits": {
              "smithy.api#documentation": "<p>Tags associated with the report generator.</p>"
            }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Describe the details of a report generator.</p>"
      }
    },
    "com.amazonaws.licensemanager#ReportGeneratorList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ReportGenerator"
      }
    },
    "com.amazonaws.licensemanager#ReportGeneratorName": {
      "type": "string",

  "traits": {
        "smithy.api#length": {
          "min": 1,
          "max": 100
        }
      }
    },
    "com.amazonaws.licensemanager#ReportType": {
      "type": "enum",
      "members": {
        "LICENSE_CONFIGURATION_SUMMARY_REPORT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "LicenseConfigurationSummaryReport"
          }
        },
        "LICENSE_CONFIGURATION_USAGE_REPORT": {
          "target": "smithy.api#Unit",
          "traits": {
            "smithy.api#enumValue": "LicenseConfigurationUsageReport"
```

```
            }
          }
        }
    },
    "com.amazonaws.licensemanager#ReportTypeList": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanager#ReportType"

}
    },
    "com.amazonaws.licensemanager#ResourceInventory": {
      "type": "structure",
      "members": {
        "ResourceId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>ID of the resource.</p>"
          }
        },
        "ResourceType": {
          "target": "com.amazonaws.licensemanager#ResourceType",
          "traits": {
            "smithy.api#documentation": "<p>Type of resource.</p>"
          }
        },
        "ResourceArn": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource.</p>"
          }
        },
        "Platform": {
          "target": "com.amazonaws.licensemanager#String",
           "traits": {
            "smithy.api#documentation": "<p>Platform of the resource.</p>"
          }
        },
        "PlatformVersion": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>Platform version of the resource in the inventory.</p>"
          }
        },
        "ResourceOwningAccountId": {
          "target": "com.amazonaws.licensemanager#String",
          "traits": {
            "smithy.api#documentation": "<p>ID of the account that owns the resource.</p>"
```

```
            }
        }
    },
    "traits": {
        "smithy.api#documentation": "<p>Details about a resource.</p>"
    }
},
"com.amazonaws.licensemanager#ResourceInventoryList": {
    "type": "list",
     "member": {
        "target": "com.amazonaws.licensemanager#ResourceInventory"
    }
},
"com.amazonaws.licensemanager#ResourceLimitExceededException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
        }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "ResourceLimitExceeded",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>Your resource limits have been exceeded.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceNotFoundException": {
    "type": "structure",
    "members": {
        "Message": {
            "target": "com.amazonaws.licensemanager#Message"
         }
    },
    "traits": {
        "aws.protocols#awsQueryError": {
            "code": "InvalidResource.NotFound",
            "httpResponseCode": 400
        },
        "smithy.api#documentation": "<p>The resource cannot be found.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
    }
},
"com.amazonaws.licensemanager#ResourceType": {
```

```
        "type": "enum",
        "members": {
          "EC2_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "EC2_INSTANCE"
            }
          },
          "EC2_HOST": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "EC2_HOST"
            }
          },
          "EC2_AMI": {
             "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "EC2_AMI"
            }
          },
          "RDS": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "RDS"
            }
          },
          "SYSTEMS_MANAGER_MANAGED_INSTANCE": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "SYSTEMS_MANAGER_MANAGED_INSTANCE"
            }
          }
        }
      },
      "com.amazonaws.licensemanager#S3Location": {
        "type": "structure",
        "members": {
          "bucket": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Name of the S3 bucket reports are published
to.</p>"
            }
          },
          "keyPrefix": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Prefix of the S3 bucket reports are published to.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details of the S3 bucket that report generator reports are published
to.</p>"
        }
      },
      "com.amazonaws.licensemanager#ServerInternalException": {
        "type": "structure",
        "members": {
          "Message": {
            "target": "com.amazonaws.licensemanager#Message"
          }
        },
        "traits": {
          "aws.protocols#awsQueryError": {
            "code": "InternalError",
            "httpResponseCode": 500
          },
          "smithy.api#documentation":
 "<p>The server experienced an internal error. Try again.</p>",
          "smithy.api#error": "server",
          "smithy.api#httpError": 500
        }
      },
      "com.amazonaws.licensemanager#SignedToken": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 4096
          }
        }
      },
      "com.amazonaws.licensemanager#StatusReasonMessage": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 400
          },
          "smithy.api#pattern": "^[\\s\\S]+$"
        }
      },
      "com.amazonaws.licensemanager#String": {
        "type": "string"
      },
      "com.amazonaws.licensemanager#StringList": {
```

```
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }

    },
    "com.amazonaws.licensemanager#Tag": {
        "type": "structure",
        "members": {
          "Key": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The tag key.</p>"
            }
          },
          "Value": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>The tag value.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Details about the tags for a resource. For more information about tagging support in\n          License Manager, see the <a href=\"https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html\">TagResource</a> operation.</p>"
        }
    },
    "com.amazonaws.licensemanager#TagKeyList":
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#String"
        }
    },
    "com.amazonaws.licensemanager#TagList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#Tag"
        }
    },
    "com.amazonaws.licensemanager#TagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#TagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanager#TagResourceResponse"
```

```
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Adds the specified tags to the specified resource. The following resources support\n tagging in License Manager:</p>\n <ul>\n <li>\n <p>Licenses</p>\n </li>\n <li>\n <p>Grants</p>\n </li>\n <li>\n <p>License configurations</p>\n </li>\n <li>\n <p>Report generators</p>\n </li>\n </ul>"
        }
    },
    "com.amazonaws.licensemanager#TagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn":
{
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the resource. The following examples provide an example\n ARN for each supported resource in License Manager:</p>\n <ul>\n <li>\n <p>Licenses -\n <code>arn:aws:license-manager::111122223333:license:l-EXAMPLE2da7646d6861033667f20e895</code>\n </p>\n </li>\n <li>\n <p>Grants -\n <code>arn:aws:license-manager::111122223333:grant:g-EXAMPLE7b19f4a0ab73679b0beb52707</code>\n </p>\n </li>\n <li>\n <p>License configurations -\n <code>arn:aws:license-manager:us-east-1:111122223333:license-configuration:lic-EXAMPLE6a788d4c8acd4264ff0ecf2ed2d</code>\n </p>\n </li>\n <li>\n

<p>Report generators -\n <code>arn:aws:license-manager:us-east-1:111122223333:report-generator:r-EXAMPLE825b4a4f8fe5a3e0c88824e5fc6</code>\n </p>\n </li>\n </ul>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanager#TagList",
```

```
            "traits": {
              "smithy.api#documentation": "<p>One or more tags.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#TokenData": {
        "type": "structure",
        "members": {
          "TokenId": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token ID.</p>"
            }
          },
          "TokenType": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Type of token generated. The supported value is
<code>REFRESH_TOKEN</code>.</p>"
            }
          },
          "LicenseArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license.</p>"
            }
          },
          "ExpirationTime": {
            "target": "com.amazonaws.licensemanager#ISO8601DateTime",
            "traits":
{
              "smithy.api#documentation": "<p>Token expiration time, in ISO8601-UTC format.</p>"
            }
          },
          "TokenProperties": {
            "target": "com.amazonaws.licensemanager#MaxSize3StringList",
```

```
            "traits": {
              "smithy.api#documentation": "<p>Data specified by the caller.</p>"
            }
          },
          "RoleArns": {
            "target": "com.amazonaws.licensemanager#ArnList",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Names (ARN) of the roles included in the
token.</p>"
            }
          },
          "Status": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Token status. The possible values are
<code>AVAILABLE</code> and <code>DELETED</code>.</p>"
             }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes a token.</p>"
        }
      },
      "com.amazonaws.licensemanager#TokenList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanager#TokenData"
        }
      },
      "com.amazonaws.licensemanager#TokenString": {
        "type": "string",
        "traits": {
          "smithy.api#length": {
            "min": 0,
            "max": 4096
          },
          "smithy.api#pattern": "^\\S+$"
        }
      },
      "com.amazonaws.licensemanager#TokenType": {
        "type": "enum",
        "members": {
          "REFRESH_TOKEN": {
            "target": "smithy.api#Unit",
            "traits": {
              "smithy.api#enumValue": "REFRESH_TOKEN"
            }
```

```
        }
      }
    },
    "com.amazonaws.licensemanager#UnsupportedDigitalSignatureMethodException": {
      "type": "structure",
      "members": {
        "Message": {
          "target": "com.amazonaws.licensemanager#Message"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The digital signature method is unsupported. Try your request
again.</p>",
        "smithy.api#error": "client",
        "smithy.api#httpError": 400
      }
    },
    "com.amazonaws.licensemanager#UntagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanager#UntagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanager#UntagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanager#AuthorizationException"
        },
        {
          "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
          "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
          "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Removes the specified tags from the specified resource.</p>"
      }
    },
    "com.amazonaws.licensemanager#UntagResourceRequest": {
      "type": "structure",
```

```
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation":
"<p>Amazon Resource Name (ARN) of the resource.</p>",
              "smithy.api#required": {}
            }
          },
          "TagKeys": {
            "target": "com.amazonaws.licensemanager#TagKeyList",
            "traits": {
              "smithy.api#documentation": "<p>Keys identifying the tags to remove.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#UpdateLicenseConfiguration": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
```

```
            },
            {
              "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
            },
            {
              "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Modifies the attributes of an existing license configuration.</p>"
          }
        },
        "com.amazonaws.licensemanager#UpdateLicenseConfigurationRequest": {
          "type": "structure",
          "members": {
            "LicenseConfigurationArn": {
              "target": "com.amazonaws.licensemanager#String",
              "traits": {
                "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the license
configuration.</p>",
                "smithy.api#required": {}
              }
            },
            "LicenseConfigurationStatus": {
              "target": "com.amazonaws.licensemanager#LicenseConfigurationStatus",
              "traits": {
                "smithy.api#documentation": "<p>New status of the license configuration.</p>"

        }
            },
            "LicenseRules": {
              "target": "com.amazonaws.licensemanager#StringList",
              "traits": {
                "smithy.api#documentation": "<p>New license rule. The only rule that you can add after you create a
license\n          configuration is licenseAffinityToHost.</p>"
              }
            },
            "LicenseCount": {
              "target": "com.amazonaws.licensemanager#BoxLong",
              "traits": {
                "smithy.api#documentation": "<p>New number of licenses managed by the license
configuration.</p>"
              }
            },
            "LicenseCountHardLimit": {
```

```
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {
              "smithy.api#documentation": "<p>New hard limit of the number of available licenses.</p>"
            }
          },

          "Name": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>New name of the license configuration.</p>"
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>New description of the license configuration.</p>"
            }
          },
          "ProductInformationList": {
            "target": "com.amazonaws.licensemanager#ProductInformationList",
            "traits": {
              "smithy.api#documentation": "<p>New product information.</p>"
            }
          },
          "DisassociateWhenNotFound": {
            "target": "com.amazonaws.licensemanager#BoxBoolean",
            "traits": {

     "smithy.api#documentation": "<p>When true, disassociates a resource when software is uninstalled.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanager#UpdateLicenseConfigurationResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanager#UpdateLicenseManagerReportGenerator": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest"
        },
```

```
        "output": {
          "target": "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"

          },
          {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
          },
          {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
          },
          {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceLimitExceededException"
          },
          {
            "target": "com.amazonaws.licensemanager#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
          },
          {
            "target": "com.amazonaws.licensemanager#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Updates a report generator.</p>\n
      <p>After you make changes to a report generator, it starts generating new reports within 60 minutes of being updated.</p>"
        }
      },
      "com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorRequest": {
        "type": "structure",
        "members": {
          "LicenseManagerReportGeneratorArn": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the report generator to update.</p>",
              "smithy.api#required": {}
            }
          },
          "ReportGeneratorName": {
```

```
            "target": "com.amazonaws.licensemanager#ReportGeneratorName",
            "traits": {
              "smithy.api#documentation": "<p>Name of the report generator.</p>",
              "smithy.api#required": {}
            }

        },
        "Type": {
            "target": "com.amazonaws.licensemanager#ReportTypeList",
            "traits": {
              "smithy.api#documentation": "<p>Type of reports to generate. The following report types are supported:</p>\n <ul>\n <li>\n <p>License configuration report - Reports the number and details of consumed licenses for a license configuration.</p>\n </li>\n <li>\n <p>Resource report - Reports the tracked licenses and resource consumption for a license configuration.</p>\n </li>\n </ul>",
              "smithy.api#required": {}
            }
          },
          "ReportContext": {
            "target": "com.amazonaws.licensemanager#ReportContext",
            "traits": {
              "smithy.api#documentation": "<p>The report context.</p>",
              "smithy.api#required":
 {}
            }
          },
          "ReportFrequency": {
            "target": "com.amazonaws.licensemanager#ReportFrequency",
            "traits": {
              "smithy.api#documentation": "<p>Frequency by which reports are generated.</p>",
              "smithy.api#required": {}
            }
          },
          "ClientToken": {
            "target": "com.amazonaws.licensemanager#ClientRequestToken",
            "traits": {
              "smithy.api#documentation": "<p>Unique, case-sensitive identifier that you provide to ensure the idempotency of the request.</p>",
              "smithy.api#required": {}
            }
          },
          "Description": {
            "target": "com.amazonaws.licensemanager#String",
            "traits": {
              "smithy.api#documentation": "<p>Description of the report
 generator.</p>"
            }
          }
```

```
    },
    "traits": {
        "smithy.api#input": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseManagerReportGeneratorResponse": {
    "type": "structure",
    "members": {},
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResource": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse"
    },
    "errors": [
        {
            "target": "com.amazonaws.licensemanager#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanager#AuthorizationException"
         },
        {
            "target": "com.amazonaws.licensemanager#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
        },
        {
            "target": "com.amazonaws.licensemanager#InvalidResourceStateException"
        },
        {
            "target": "com.amazonaws.licensemanager#LicenseUsageException"
        },
        {
            "target": "com.amazonaws.licensemanager#RateLimitExceededException"
        },
        {
            "target": "com.amazonaws.licensemanager#ServerInternalException"
        }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Adds or removes the specified license configurations for the specified
```

```
Amazon Web Services resource.</p>\n        <p>You
 can update the license specifications of AMIs, instances, and hosts.\n        You cannot update the license
specifications for launch templates and CloudFormation templates, \n        as they send license configurations to the
operation that creates the resource.</p>"
          }
       },
       "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceRequest": {
          "type": "structure",
          "members": {
             "ResourceArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                   "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon Web Services
resource.</p>",
                   "smithy.api#required": {}
                }
             },
             "AddLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                   "smithy.api#documentation":
 "<p>ARNs of the license configurations to add.</p>"
                }
             },
             "RemoveLicenseSpecifications": {
                "target": "com.amazonaws.licensemanager#LicenseSpecifications",
                "traits": {
                   "smithy.api#documentation": "<p>ARNs of the license configurations to remove.</p>"
                }
             }
          },
          "traits": {
             "smithy.api#input": {}
          }
       },
       "com.amazonaws.licensemanager#UpdateLicenseSpecificationsForResourceResponse": {
          "type": "structure",
          "members": {},
          "traits": {
             "smithy.api#output": {}
          }
       },
       "com.amazonaws.licensemanager#UpdateServiceSettings": {
          "type": "operation",
          "input": {
             "target": "com.amazonaws.licensemanager#UpdateServiceSettingsRequest"
          },
          "output":
```

```
{
            "target": "com.amazonaws.licensemanager#UpdateServiceSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanager#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanager#AuthorizationException"
            },
            {
                "target": "com.amazonaws.licensemanager#InvalidParameterValueException"
            },
            {
                "target": "com.amazonaws.licensemanager#RateLimitExceededException"
            },
            {
                "target": "com.amazonaws.licensemanager#ServerInternalException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates License Manager settings for the current Region.</p>"
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsRequest": {

  "type": "structure",
        "members": {
            "S3BucketArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon S3 bucket where
the License Manager information is stored.</p>"
                }
            },
            "SnsTopicArn": {
                "target": "com.amazonaws.licensemanager#String",
                "traits": {
                    "smithy.api#documentation": "<p>Amazon Resource Name (ARN) of the Amazon SNS topic used
for License Manager alerts.</p>"
                }
            },
            "OrganizationConfiguration": {
                "target": "com.amazonaws.licensemanager#OrganizationConfiguration",
                "traits": {
                    "smithy.api#documentation": "<p>Enables integration with Organizations for cross-account
discovery.</p>"
```

```
                }
            },
            "EnableCrossAccountsDiscovery": {
                "target": "com.amazonaws.licensemanager#BoxBoolean",
                "traits": {
                    "smithy.api#documentation": "<p>Activates cross-account discovery.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanager#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanager#UsageOperation": {
        "type": "string",
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            }
        }
    },
    "com.amazonaws.licensemanager#ValidationException": {
        "type": "structure",
         "members": {
            "Message": {
                "target": "com.amazonaws.licensemanager#Message"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
            "smithy.api#error": "client",
            "smithy.api#httpError": 400
        }
    }
  }
}
CheckoutBorrowLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
```

legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
CheckInLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart

```
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Gets detailed information about the specified license.
func (c *Client) GetLicense(ctx context.Context, params *GetLicenseInput, optFns ...func(*Options))
(*GetLicenseOutput, error) {
```

```
 if params == nil {
  params = &GetLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "GetLicense", params, optFns,
c.addOperationGetLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*GetLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type GetLicenseInput struct {

 // Amazon Resource Name (ARN) of the license.
 //
 // This member is required.
 LicenseArn *string

 // License version.
 Version *string

 noSmithyDocumentSerde
}

type
 GetLicenseOutput struct {

 // License details.
 License *types.License

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationGetLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpGetLicense{}, middleware.After)
 if err != nil {
  return err
 }
```

```
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpGetLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "GetLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err
!= nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
```

```
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options);
 err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpGetLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opGetLicense(options.Region), middleware.Before);
err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return
```

```
 nil
}

func newServiceMetadataMiddleware_opGetLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "GetLicense",
 }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Creates a license.
func (c *Client) CreateLicense(ctx context.Context, params *CreateLicenseInput, optFns ...func(*Options))
(*CreateLicenseOutput, error) {
 if params == nil {
  params = &CreateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CreateLicense", params, optFns,
c.addOperationCreateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CreateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CreateLicenseInput struct {

 // License beneficiary.
 //
 // This member is required.
 Beneficiary *string
```

```
// Unique, case-sensitive identifier that you provide to ensure the idempotency of
// the request.
//
//
This member is required.
ClientToken *string

// Configuration for consumption of the license. Choose a provisional
// configuration for workloads running with continuous connectivity. Choose a
// borrow configuration for workloads with offline usage.
//
// This member is required.
ConsumptionConfiguration *types.ConsumptionConfiguration

// License entitlements.
//
// This member is required.
Entitlements []types.Entitlement

// Home Region for the license.
//
// This member is required.
HomeRegion *string

// License issuer.
//
// This member is required.
Issuer *types.Issuer

// License name.
//
// This member is required.
LicenseName *string

// Product name.
//
// This member is required.
ProductName *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// Date and time range during which the license is valid, in ISO8601-UTC format.
//
// This member is required.
Validity *types.DatetimeRange
```

```
 // Information about
 the license.
 LicenseMetadata []types.Metadata

 // Tags to add to the license. For more information about tagging support in
 // License Manager, see the [TagResource]operation.
 //
 // [TagResource]: https://docs.aws.amazon.com/license-manager/latest/APIReference/API_TagResource.html
 Tags []types.Tag

 noSmithyDocumentSerde
}

type CreateLicenseOutput struct {

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License status.
 Status types.LicenseStatus

 // License version.
 Version *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCreateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCreateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCreateLicense{},
 middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CreateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }
```

```
if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err
= addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack, c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
```

```
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCreateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCreateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return
 err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCreateLicense(region string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CreateLicense",
 }
```

}
AWS SDK for Go
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AssociateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
  RequestIDRetriever
  OperationDeserializer
  AddTimeOffsetMiddleware
  RecordResponseTiming
  RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

```
package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license for offline use.
func (c *Client) CheckoutBorrowLicense(ctx context.Context, params *CheckoutBorrowLicenseInput, optFns
...func(*Options)) (*CheckoutBorrowLicenseOutput, error) {
 if params == nil {
  params = &CheckoutBorrowLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutBorrowLicense", params, optFns,
c.addOperationCheckoutBorrowLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutBorrowLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutBorrowLicenseInput struct {

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 //
 the request.
 //
 // This member is required.
 ClientToken *string

 // Digital signature method. The possible value is JSON Web Signature (JWS)
 // algorithm PS384. For more information, see [RFC 7518 Digital Signature with RSASSA-PSS].
 //
 // [RFC 7518 Digital Signature with RSASSA-PSS]: https://tools.ietf.org/html/rfc7518#section-3.5
 //
 // This member is required.
 DigitalSignatureMethod types.DigitalSignatureMethod

 // License entitlements. Partial checkouts are not supported.
 //
```

```
 // This member is required.
 Entitlements []types.EntitlementData

 // Amazon Resource Name (ARN) of the license. The license must use the borrow
 // consumption configuration.
 //
 // This member is required.
 LicenseArn *string

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Node ID.
 NodeId *string

 noSmithyDocumentSerde
}

type CheckoutBorrowLicenseOutput struct {

 // Information about constraints.
 CheckoutMetadata []types.Metadata

 // Allowed license entitlements.
 EntitlementsAllowed
 []types.EntitlementData

 // Date and time at which the license checkout expires.
 Expiration *string

 // Date and time at which the license checkout is issued.
 IssuedAt *string

 // Amazon Resource Name (ARN) of the license.
 LicenseArn *string

 // License consumption token.
 LicenseConsumptionToken *string

 // Node ID.
 NodeId *string

 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata
```

```
 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutBorrowLicenseMiddlewares(stack *middleware.Stack, options Options) (err
error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutBorrowLicense{}, middleware.After)
 if err != nil {
  return
 err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutBorrowLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack, options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
```

```
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack);
err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutBorrowLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutBorrowLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options);
err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
```

```
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutBorrowLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckoutBorrowLicense",
 }
}
```

```
{
  "smithy": "2.0",
  "shapes": {
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger": {
      "type": "integer"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong": {
      "type": "long"
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
        },
```

```
    {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Remove a third-party subscription provider from the Bring Your Own License (BYOL) subscriptions \n\t\t\tregistered to your account.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/DeregisterSubscriptionProvider"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the subscription provider resource to deregister.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Name": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of name to filter by.</p>"
```

```
            }
          },
          "Values": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>One or more values for the name to filter by.</p>"
            }
          },
          "Operator": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Operator",
            "traits": {
              "smithy.api#documentation": "<p>An operator for filtering results.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A filter object that is used to return more specific results from a describe
operation.\n      Filters can be used to match a set of resources by specific criteria.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList": {
        "type":
 "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Filter"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest"
        },
        "output": {
          "target":
"com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
```

```
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Get details for a Bring Your Own License (BYOL) subscription that's registered to your account.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/GetRegisteredSubscriptionProvider"
            },
            "smithy.api#idempotent": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderRequest": {
          "type": "structure",
          "members": {
            "SubscriptionProviderArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation":
 "<p>The Amazon Resource Name (ARN) of the BYOL registration resource to get details for.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProviderResponse": {
          "type": "structure",
          "members": {
            "SubscriptionProviderArn": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
              "traits": {
                "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for the BYOL registration resource specified in the request.</p>"
              }
            },
            "SubscriptionProviderSource": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",

           "traits": {
                "smithy.api#documentation": "<p>The subscription provider for the BYOL registration resource specified \n\t\t\tin the request.</p>"
              }
            },
            "SecretArn": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the third-party access secret stored in Secrets Manager for the BYOL \n\t\t\tregistration resource specified in the request.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>The status of the Linux subscription provider access token from the last \n\t\t\tsuccessful subscription data request.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The detailed message from your subscription provider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time License Manager retrieved subscription details \n\t\t\tfrom your registered third-party Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
```

```
            {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Linux subscriptions service settings for your account.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/GetServiceSettings"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsRequest": {
        "type": "structure",
        "members": {}
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>Lists
 the settings defined for Linux subscriptions discovery. The settings include if\n      Organizations integration has been enabled, and which Regions data will be aggregated from.</p>"
                }
            },
            "Status": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
                "traits": {
                    "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
                }
            },
            "StatusMessage": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
                "traits": {
                    "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
```

```
            }
          },
          "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
             "traits": {
               "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated
data for Linux\n      subscriptions.</p>"
            }
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Instance": {
        "type": "structure",
        "members": {
          "AmiId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The AMI ID used to launch the instance.</p>"
            }
          },
          "InstanceID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The instance ID of the resource.</p>"
            }
          },
          "InstanceType": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>The instance type of the resource.</p>"
            }
          },
          "AccountID": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The account ID which owns the instance.</p>"
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the instance.</p>"
            }
          },
          "Region": {
            "target": "smithy.api#String",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The Region the instance is running in.</p>"
            }
        },
        "UsageOperation": {
            "target": "smithy.api#String",

   "traits": {
                "smithy.api#documentation": "<p>The usage operation of the instance. For more information, see For more information, see\n        <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i>.</p>"
            }
        },
        "ProductCode": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList",
            "traits": {
                "smithy.api#documentation": "<p>The product code for the instance. For more information, see <a href=\"https://docs.aws.amazon.com/license-manager/latest/userguide/linux-subscriptions-usage-operation.html\">Usage\n        operation values</a> in the <i>License Manager User Guide</i> .</p>"
            }
        },
        "LastUpdatedTime": {
            "target": "smithy.api#String",
             "traits": {
                "smithy.api#documentation": "<p>The time in which the last discovery updated the instance details.</p>"
            }
        },
        "SubscriptionName": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The name of the license subscription that the instance uses.</p>"
            }
        },
        "OsVersion": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The operating system software version that runs on your instance.</p>"
            }
        },
        "SubscriptionProviderCreateTime": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The timestamp when you registered
 the third-party Linux subscription \n\t\t\tprovider for the subscription that the instance uses.</p>"
            }
        },
```

```
            "SubscriptionProviderUpdateTime": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The timestamp from the last time that the instance synced with the
registered \n\t\t\tthird-party Linux subscription provider.</p>"
               }
            },
            "DualSubscription": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>Indicates that you have two different license subscriptions for
\n\t\t\tthe same software on your instance.</p>"
               }
            },
            "RegisteredWithSubscriptionProvider": {
               "target": "smithy.api#String",
               "traits": {

    "smithy.api#documentation": "<p>Indicates that your instance uses a BYOL license subscription from \n\t\t\ta
third-party Linux subscription provider that you've registered with License Manager.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#documentation": "<p>Details discovered information about a running instance using Linux
subscriptions.</p>"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList": {
         "type": "list",
         "member": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Instance"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException": {
         "type": "structure",
         "members": {
            "message": {
               "target": "smithy.api#String"
            }
         },
         "traits": {
            "smithy.api#documentation":
 "<p>An exception occurred with the service.</p>",
            "smithy.api#error": "server"
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LicenseManagerLinuxSubscriptions": {
```

```
"type": "service",
"version": "2018-05-10",
"operations": [
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#DeregisterSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetRegisteredSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#GetServiceSettings"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions"
     },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings"
    }
],
"traits": {
    "aws.api#service": {
        "sdkId": "License Manager Linux Subscriptions",
         "arnNamespace": "license-manager-linux-subscriptions",
        "cloudTrailEventSource": "license-manager-linux-subscriptions.amazonaws.com"
    },
    "aws.auth#sigv4": {
        "name": "license-manager-linux-subscriptions"
    },
    "aws.protocols#restJson1": {},
    "smithy.api#cors": {
```

```
            "additionalAllowedHeaders": [
              "*",
              "content-type",
              "x-amz-content-sha256",
              "x-amz-user-agent",
              "x-amzn-platform-id",
              "x-amzn-trace-id"
            ],
            "additionalExposedHeaders": [
              "x-amzn-errortype",
              "x-amzn-requestid",
              "x-amzn-trace-id"
            ]
          },
          "smithy.api#documentation": "<p>With License Manager,
 you can discover and track your commercial Linux subscriptions on running\n      Amazon EC2 instances.</p>",
          "smithy.api#title": "AWS License Manager Linux Subscriptions",
          "smithy.rules#endpointRuleSet": {
            "version": "1.0",
            "parameters": {
              "Region": {
                "builtIn": "AWS::Region",
                "required": false,
                "documentation": "The AWS region used to dispatch the request.",
                "type": "String"
              },
              "UseDualStack": {
                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not
support dual-stack, dispatching the request MAY return an error.",
                 "type": "Boolean"
              },
              "UseFIPS": {
                "builtIn": "AWS::UseFIPS",
                "required": true,
                "default": false,
                "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the
configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                "type": "Boolean"
              },
              "Endpoint": {
                "builtIn": "SDK::Endpoint",
                "required": false,
                "documentation": "Override the endpoint used to send this request",
                "type": "String"
              }
```

```
        },
        "rules": [
          {
            "conditions": [
              {
                "fn": "isSet",
                "argv": [
                  {
                    "ref": "Endpoint"
                  }
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "ref": "UseFIPS"
                      },
                      true
                    ]
                  }

    ],
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
                "type": "error"
              },
              {
                "conditions": [],
                "rules": [
                  {
                    "conditions": [
                      {
                        "fn": "booleanEquals",
                        "argv": [
                          {
                            "ref": "UseDualStack"
                          },
                          true
                        ]

}
                    ],
                    "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
                    "type": "error"
```

```
            },
            {
              "conditions": [],
              "endpoint": {
                "url": {
                  "ref": "Endpoint"
                },
                "properties": {},
                "headers": {}
              },
              "type": "endpoint"
            }
          ],
          "type": "tree"

    }
    ],
    "type": "tree"
},
{
    "conditions": [],
    "rules": [
      {
        "conditions": [
          {
            "fn": "isSet",
            "argv": [
              {
                "ref": "Region"
              }
            ]
          }
        ],
        "rules": [
          {
            "conditions": [
              {

    "fn": "aws.partition",
                "argv": [
                  {
                    "ref": "Region"
                  }
                ],
                "assign": "PartitionResult"
              }
            ],
            "rules": [
```

```
                {
                  "conditions": [
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {

                    "ref": "UseFIPS"
                        },
                        true
                      ]
                    },
                    {
                      "fn": "booleanEquals",
                      "argv": [
                        {
                          "ref": "UseDualStack"
                        },
                        true
                      ]
                    }

],
                  "rules": [
                    {
                      "conditions": [
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
                              "argv": [
                                {
                                  "ref": "PartitionResult"

            },
                                "supportsFIPS"
                              ]
                            }
                          ]
                        },
                        {
                          "fn": "booleanEquals",
                          "argv": [
                            true,
                            {
                              "fn": "getAttr",
```

```
                "argv": [

                {
                    "ref": "PartitionResult"
                },
                "supportsDualStack"
                ]
            }
            ]
        }
        ],
        "rules": [
        {
            "conditions": [],

    "rules": [
                {
                "conditions": [],
                "endpoint": {
                    "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}
                },
                "type": "endpoint"
                }
            ],

            "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "FIPS and DualStack are enabled, but this partition does not support
one or both",

            "type": "error"
        }
        ],
        "type": "tree"
    },
    {

        "conditions": [
        {
            "fn": "booleanEquals",
            "argv": [
```

```
                {
                  "ref": "UseFIPS"
                },
                true
              ]
            }
          ],
          "rules": [
            {
              "conditions": [
                {

        "fn": "booleanEquals",
                  "argv": [
                    {
                      "fn": "getAttr",
                      "argv": [
                        {
                          "ref": "PartitionResult"
                        },
                        "supportsFIPS"
                      ]
                    },
                    true

                ]
                }
              ],
              "rules": [
                {
                  "conditions": [],
                  "rules": [
                    {
                      "conditions": [],
                      "endpoint": {
                        "url": "https://license-manager-linux-subscriptions-
fips.{Region}.{PartitionResult#dnsSuffix}",

    "properties": {},
                        "headers": {}
                      },
                      "type": "endpoint"
                    }
                  ],
                  "type": "tree"
                }
              ],
              "type": "tree"
```

```
                },
                {
                    "conditions": [],
                    "error": "FIPS is enabled
but this partition does not support FIPS",
                    "type": "error"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true

    ]
                }
            ],
            "rules": [
                {
                    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {

                                            "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]
                                }
                            ]
                        }
                    ],
                    "rules": [
                        {
                            "conditions": [],
                            "rules": [
```

```
        {
                                                "conditions": [],
                                                "endpoint": {
                                                    "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                                    "properties": {},
                                                    "headers": {}
                                                },
                                                "type": "endpoint"
                                            }
                                        ],
                                        "type": "tree"

                                }
                                    ],
                                    "type": "tree"
                                },
                                {
                                    "conditions": [],
                                    "error": "DualStack is enabled but this partition does not support DualStack",
                                    "type": "error"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "rules": [
                                {
                                    "conditions": [],
                                    "endpoint": {
                                        "url": "https://license-manager-linux-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",
                                        "properties": {},
                                        "headers": {}
                                    },
                                    "type": "endpoint"
                                }
                            ],
                            "type": "tree"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
```

```
                "conditions": [],
                "error": "Invalid Configuration: Missing Region",
                "type": "error"
              }
            ],
            "type": "tree"
          }
        ]
      },
      "smithy.rules#endpointTests": {
        "testCases": [
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.api.aws"

        }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": true
            }
          },
          {
            "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions-fips.us-east-1.amazonaws.com"
              }
            },
            "params": {
              "Region": "us-east-1",
              "UseFIPS": true,
              "UseDualStack": false
            }
          },
          {

         "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
            "expect": {
              "endpoint": {
                "url": "https://license-manager-linux-subscriptions.us-east-1.api.aws"
              }
            },
            "params": {
              "Region": "us-east-1",
```

```
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-east-1.amazonaws.com"
            }

      },
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {

 "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.cn-north-1.amazonaws.com.cn"
            }
          },
          "params": {
            "Region": "cn-north-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
```

```
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {

"documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-linux-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }

      },
      "params": {
        "Region": "us-gov-east-1",
```

```
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-gov-east-1.api.aws"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {

"documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-gov-east-1.amazonaws.com"
            }
          },
          "params": {
            "Region": "us-gov-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {

        "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
```

```
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack
enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-iso-east-1.c2s.ic.gov"
            }
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS":
false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack disabled",
          "expect": {
```

```
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
          "expect": {
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {

          "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-linux-subscriptions.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
          "expect": {
            "endpoint": {
              "url": "https://example.com"
            }

},
          "params": {
            "Region": "us-east-1",
            "UseFIPS": false,
            "UseDualStack": false,
            "Endpoint": "https://example.com"
```

```
      }
    },
    {
      "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
      "expect": {
        "endpoint": {
          "url": "https://example.com"
        }
      },
      "params": {
        "UseFIPS": false,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {

      "documentation": "For custom endpoint with fips enabled and dualstack disabled",
      "expect": {
        "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": true,
        "UseDualStack": false,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "For custom endpoint with fips disabled and dualstack enabled",
      "expect": {
        "error": "Invalid Configuration: Dualstack and custom endpoint are not supported"
      },
      "params": {

 "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": true,
        "Endpoint": "https://example.com"
      }
    },
    {
      "documentation": "Missing region",
      "expect": {
        "error": "Invalid Configuration: Missing Region"
      }
    }
```

```
            ],
            "version": "1.0"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled LinuxSubscriptionsDiscovery"

      },
            {
              "name": "Disabled",
              "value": "Disabled",
              "documentation": "Disabled LinuxSubscriptionsDiscovery"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings": {
        "type": "structure",
        "members": {
          "SourceRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
              "smithy.api#documentation": "<p>The Regions in which to discover data for Linux
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
          "OrganizationIntegration": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration",
            "traits": {
              "smithy.api#documentation":
"<p>Details if you have enabled resource discovery across your accounts in Organizations.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Lists the settings defined for discovering Linux subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstances": {
```

```
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },

  {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Lists the running Amazon EC2 instances that were discovered with
commercial Linux\n      subscriptions.</p>",
          "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/subscription/ListLinuxSubscriptionInstances"
          },
          "smithy.api#idempotent": {},
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "Instances"
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesRequest":
 {
        "type": "structure",
        "members": {
          "Filters": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>An array of structures that you can use to filter the results by your
specified criteria. \n    \tFor example, you can specify <code>Region</code> in the <code>Name</code>, with the
\n    \t<code>contains</code> operator to list all subscriptions that match a partial string in the \n
\t<code>Value</code>, such as <code>us-west</code>.</p>\n          <p>For each filter, you can specify one of the
following values for the <code>Name</code> key \n    \tto streamline results:</p>\n          <ul>\n          <li>\n
```

\n <code>AccountID</code>\n \n \n \n \n <code>AmiID</code>\n \n \n \n \n <code>DualSubscription</code>\n \n \n \n \n <code>InstanceID</code>\n \n \n \n \n <code>InstanceType</code>\n \n \n \n \n <code>ProductCode</code>\n \n \n \n \n <code>Region</code>\n \n \n \n \n <code>Status</code>\n \n \n \n \n <code>UsageOperation</code>\n \n \n \n For each filter, you can use one of the following <code>Operator</code>
values to \n \t\tdefine the behavior of the filter: \n \n \n \n <code>contains</code>\n \n \n \n \n <code>equals</code>\n \n \n \n \n <code>Notequal</code>\n \n \n "
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": " The maximum items to return in a request. "
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": " A token to specify where to
start paginating. This \n\tis the nextToken from a previously truncated response. ",
              "smithy.api#length": {
                "min": 1,
                "max": 16384
              }
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if parameters in request increases."
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionInstancesResponse": {
        "type": "structure",
        "members": {
          "Instances": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InstanceList",
            "traits": {
              "smithy.api#documentation": " An array that contains instance objects. "
            }
          },

```
            "NextToken": {

        "target": "smithy.api#String",
                "traits": {
                  "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
                }
              }
            }
          },
          "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptions": {
            "type": "operation",
            "input": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest"
            },
            "output": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse"
            },
            "errors": [
              {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
              },
               {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
              },
              {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
              }
            ],
            "traits": {
              "smithy.api#documentation": "<p>Lists the Linux subscriptions that have been discovered. If you have linked your\n      organization, the returned results will include data aggregated across your accounts in\n Organizations.</p>",
              "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/ListLinuxSubscriptions"
              },
              "smithy.api#idempotent": {},
              "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",

   "items": "Subscriptions"
              }
            }
```

```
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsRequest": {
      "type": "structure",
      "members": {
        "Filters": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#FilterList",
          "traits": {
            "smithy.api#documentation": "<p>An array of structures that you can use to filter the results to those
that match one or\n      more sets of key-value pairs that you specify. For example, you can filter by the name of\n
 <code>Subscription</code> with an optional operator to see subscriptions that match,\n      partially match, or don't
match a certain subscription's name.</p>\n        <p>The valid names for this filter are:</p>\n        <ul>\n
<li>\n            <p>\n              <code>Subscription</code>\n            </p>\n          </li>\n        </ul>\n
<p>The
 valid Operators for this filter are:</p>\n        <ul>\n          <li>\n            <p>\n
<code>contains</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>equals</code>\n            </p>\n          </li>\n          <li>\n            <p>\n
<code>Notequal</code>\n            </p>\n          </li>\n        </ul>"
          }
        },
        "MaxResults": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
          "traits": {
            "smithy.api#documentation": "<p>The maximum items to return in a request.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis
 the nextToken from a previously truncated response.</p>",
            "smithy.api#length": {
              "min": 1,
              "max": 16384
            }
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "NextToken length limit is half of ddb accepted limit.\nIncrease this limit if
parameters in request increases."
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ListLinuxSubscriptionsResponse": {
      "type": "structure",
      "members": {
        "Subscriptions": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList",
          "traits": {
```

```
                "smithy.api#documentation": "<p>An array that contains subscription objects.</p>"
              }
            },
            "NextToken": {
              "target": "smithy.api#String",
               "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
              }
            }
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProviders": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"

            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>List Bring Your Own License (BYOL) subscription registration resources for your account.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/subscription/ListRegisteredSubscriptionProviders"
            },
            "smithy.api#idempotent": {},
            "smithy.api#paginated": {
              "inputToken": "NextToken",
              "outputToken": "NextToken",
              "pageSize": "MaxResults",
```

```
            "items": "RegisteredSubscriptionProviders"
          }
        }

    },
     "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersRequest": {
        "type": "structure",
        "members": {
          "SubscriptionProviderSources": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList",
            "traits": {
              "smithy.api#documentation": "<p>To filter your results, specify which subscription providers to
return \n\t\t\tin the list.</p>"
            }
          },
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum items to return in a request.</p>",
              "smithy.api#range": {
                "min": 1,
                "max": 100
              }
            }

  },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This \n\tis the
nextToken from a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
     },
     "com.amazonaws.licensemanagerlinuxsubscriptions#ListRegisteredSubscriptionProvidersResponse": {
        "type": "structure",
        "members": {
          "RegisteredSubscriptionProviders": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList",
            "traits": {
              "smithy.api#documentation": "<p>The list of BYOL registration resources that fit the criteria
\n\t\t\tyou specified in the request.</p>"
            }
          },
```

```
        "NextToken": {
            "target": "smithy.api#String",
            "traits": {
                "smithy.api#documentation": "<p>The next token used for paginated responses. When this \n\tfield isn't empty, there are additional elements that the service hasn't \n\tincluded in this request. Use this token with the next request to retrieve \n\tadditional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
          {

       "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>List the metadata tags that are assigned to the \n\t\t\tspecified Amazon Web Services resource.</p>",
          "smithy.api#http": {
            "method": "GET",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#readonly": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
          "resourceArn": {
```

```
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
             "traits": {
               "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource for which to list metadata tags.</p>",
               "smithy.api#httpLabel": {},
               "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
          "tags": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The metadata tags for the requested resource.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#Operator": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "EQUAL",
              "value": "Equal",
              "documentation": "Equal operator"
            },
            {
              "name": "NOT_EQUAL",
              "value": "NotEqual",
              "documentation": "Not equal operator"
            },
            {
              "name": "CONTAINS",
              "value": "Contains",
              "documentation": "Contains operator"
            }
          ],
          "smithy.api#length": {
```

```
            "min": 1,
            "max": 20
          }
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#OrganizationIntegration":
{
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "Enabled",
              "value": "Enabled",
              "documentation": "Enabled OrganizationIntegration"
            },
            {
              "name": "Disabled",
              "value": "Disabled",
              "documentation": "Disabled OrganizationIntegration"
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ProductCodeList": {
        "type": "list",
        "member": {
          "target": "smithy.api#String"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProvider": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest"
         },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
          }
        ],
```

```
        "traits": {
            "smithy.api#documentation": "<p>Register the supported third-party subscription provider for your Bring Your Own License (BYOL) subscription.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/RegisterSubscriptionProvider"

            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderRequest": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
                "traits": {
                    "smithy.api#documentation": "<p>The supported Linux subscription provider to register.</p>",
                    "smithy.api#required": {}
                }
            },
            "SecretArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the secret where you've stored your subscription provider's access token. For \n\t\t\tRHEL subscriptions managed through the Red Hat Subscription Manager (RHSM), the secret contains \n\t\t\tyour Red Hat Offline token.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to your registered Linux subscription provider \n\t\t\tresource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#RegisterSubscriptionProviderResponse": {
        "type": "structure",
        "members": {
            "SubscriptionProviderSource": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
```

```
            "traits": {
                "smithy.api#documentation":
 "<p>The Linux subscription provider that you registered.</p>"
            }
          },
          "SubscriptionProviderArn": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of the registration action for the Linux
subscription provider \n\t\t\tthat you requested.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider":
{
        "type": "structure",
        "members": {
          "SubscriptionProviderArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Linux subscription
provider resource that you registered.</p>"
            }
          },
          "SubscriptionProviderSource": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource",
            "traits": {
              "smithy.api#documentation": "<p>A supported third-party Linux subscription provider. License
Manager currently supports \n\t\t\tRed Hat subscriptions.</p>"
            }
          },
          "SecretArn": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn",
             "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Secrets Manager secret
that stores your registered Linux subscription provider \n\t\t\taccess token. For RHEL account subscriptions, this is
the offline token.</p>"
```

```
            }
          },
          "SubscriptionProviderStatus": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus",
            "traits": {
              "smithy.api#documentation": "<p>Indicates the status of your registered Linux subscription provider access token \n\t\t\tfrom the last time License Manager retrieved subscription data. For RHEL account subscriptions, \n\t\t\tthis is the status of the offline token.</p>"
            }
          },
          "SubscriptionProviderStatusMessage": {
            "target": "smithy.api#String",
            "traits":
{
              "smithy.api#documentation": "<p>A detailed message that's associated with your BYOL subscription \n\t\t\tprovider token status.</p>"
            }
          },
          "LastSuccessfulDataRetrievalTime": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The timestamp from the last time that License Manager accessed third-party subscription data \n\t\t\tfor your account from your registered Linux subscription provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>A third-party provider for operating system (OS) platform software and license \n\t\t\tsubscriptions, such as Red Hat. When you register a third-party Linux subscription \n\t\t\tprovider, License Manager can get subscription data from the registered provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProviderList":
{
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#RegisteredSubscriptionProvider"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Unable to find the requested Amazon Web Services resource.</p>",
```

```
            "smithy.api#error": "client"
          }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#SecretArn": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:secretsmanager:[a-z0-9-\\.]{0,63}:[a-z0-9-
\\.]{0,63}:secret:[^/]{1,1023}$"

    }
        },
        "com.amazonaws.licensemanagerlinuxsubscriptions#Status": {
          "type": "string",
          "traits": {
            "smithy.api#enum": [
              {
                "name": "InProgress",
                "value": "InProgress",
                "documentation": "InProgress status"
              },
              {
                "name": "Completed",
                "value": "Completed",
                "documentation": "Completed status"
              },
              {
                "name": "Successful",
                "value": "Successful",
                "documentation": "Successful status"
              },
              {
                "name": "Failed",
                "value": "Failed",
                "documentation": "Failed status"
              }
            ]
          }
        },

       "com.amazonaws.licensemanagerlinuxsubscriptions#StringList": {
          "type": "list",
          "member": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#length": {
                "min": 1,
                "max": 100
              }
```

```
            }
        },
        "traits": {
            "smithy.api#length": {
                "min": 1,
                "max": 100
            },
            "smithy.api#uniqueItems": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription": {
        "type": "structure",
        "members": {
            "Name":
{
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the subscription.</p>"
                }
            },
            "Type": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The type of subscription. The type can be subscription-included
with Amazon EC2, Bring Your Own\n      Subscription model (BYOS), or from the Amazon Web Services
Marketplace. Certain subscriptions may use licensing from the\n      Amazon Web Services Marketplace as well as
OS licensing from Amazon EC2 or BYOS.</p>"
                }
            },
            "InstanceCount": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#BoxLong",
                "traits": {
                    "smithy.api#documentation": "<p>The total amount of running instances using this
subscription.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>An object which details a discovered Linux subscription.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Subscription"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-
9-\\.]{1,510}/[a-z0-9-\\.]{1,510}$"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [

 {
                "name": "RedHat",
                "value": "RedHat",
                "documentation": "RedHat subscription provider namespace"
              }
            ]
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSourceList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderSource"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "ACTIVE",
              "value": "ACTIVE",
              "documentation": "ACTIVE status"
            },
            {
              "name": "INVALID",
              "value": "INVALID",
```

```
    "documentation": "INVALID status"
                },
                {
                  "name": "PENDING",
                  "value": "PENDING",
                  "documentation": "PENDING status"
                }
              ]
            }
          },
          "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList": {
            "type": "list",
            "member": {
              "target": "smithy.api#String"
            },
            "traits": {
              "smithy.api#length": {
                "min": 0,
                "max": 50
              },
              "smithy.api#sensitive": {}
            }
          },
          "com.amazonaws.licensemanagerlinuxsubscriptions#TagResource": {
            "type": "operation",
            "input": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest"
            },
            "output": {
              "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse"
             },
            "errors": [
              {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
              },
              {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
              },
              {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
              }
            ],
            "traits": {
              "smithy.api#documentation": "<p>Add metadata tags to the specified Amazon Web Services
resource.</p>",
              "smithy.api#http": {
                "method": "PUT",
                "uri": "/tags/{resourceArn}"
```

```
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceRequest": {
        "type": "structure",
        "members":
{
            "resourceArn": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services resource to which to add the specified \n\t\t\tmetadata tags.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}
                }
            },
            "tags": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The metadata tags to assign to the Amazon Web Services resource. Tags are \n\t\t\tformatted as key value pairs.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }

    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#Tags": {
        "type": "map",
        "key": {
            "target": "smithy.api#String"
        },
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
```

```
            "min": 0,
            "max": 50
          },
          "smithy.api#sensitive": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation":
"<p>The request was denied due to request throttling.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResource": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ResourceNotFoundException"
          }
        ],
        "traits": {
          "smithy.api#documentation": "<p>Remove one or more metadata tag from the specified Amazon Web
Services resource.</p>",
          "smithy.api#http": {
            "method": "DELETE",
            "uri": "/tags/{resourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
```

```
            "resourceArn": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#SubscriptionProviderArn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the Amazon Web Services
resource to remove the metadata tags from.</p>",
                  "smithy.api#httpLabel": {},
                  "smithy.api#required": {}
               }
            },
            "tagKeys": {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#TagKeyList",
               "traits": {

              "smithy.api#documentation": "<p>A list of metadata tag keys to remove from the requested
\n\t\t\tresource.</p>",
                  "smithy.api#httpQuery": "tagKeys",
                  "smithy.api#required": {}
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UntagResourceResponse": {
         "type": "structure",
         "members": {},
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettings": {
         "type": "operation",
         "input": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest"
         },
         "output": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse"

       },
         "errors": [
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#InternalServerException"
            },
            {
               "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ThrottlingException"
            },
            {
```

```
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates the service settings for Linux subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/subscription/UpdateServiceSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsRequest": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if the discovery of Linux subscriptions is enabled.</p>",
                    "smithy.api#required": {}
                }
            },
            "LinuxSubscriptionsDiscoverySettings": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
                "traits": {
                    "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n integration has been enabled, and which Regions data will be aggregated from.</p>",
                    "smithy.api#required": {}
                }
            },
            "AllowUpdate": {
                "target": "smithy.api#Boolean",
                "traits": {
                    "smithy.api#documentation": "<p>Describes if updates are allowed to the service settings for Linux subscriptions. If you\n allow updates, you can aggregate Linux subscription data in more than one home Region.</p>"
                }
            }
        }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#UpdateServiceSettingsResponse": {
        "type": "structure",
        "members": {
            "LinuxSubscriptionsDiscovery": {
                "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscovery",
```

```
            "traits": {
                "smithy.api#documentation": "<p>Lists if discovery has been enabled for Linux subscriptions.</p>"
            }
        },
        "LinuxSubscriptionsDiscoverySettings": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#LinuxSubscriptionsDiscoverySettings",
             "traits": {
                "smithy.api#documentation": "<p>The settings defined for Linux subscriptions discovery. The settings include if Organizations\n      integration has been enabled, and which Regions data will be aggregated from.</p>"
            }
        },
        "Status": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#Status",
            "traits": {
                "smithy.api#documentation": "<p>Indicates the status of Linux subscriptions settings being applied.</p>"
            }
        },
        "StatusMessage": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringMap",
            "traits": {
                "smithy.api#documentation": "<p>A message which details the Linux subscriptions service settings current status.</p>"
            }

    },
        "HomeRegions": {
            "target": "com.amazonaws.licensemanagerlinuxsubscriptions#StringList",
            "traits": {
                "smithy.api#documentation": "<p>The Region in which License Manager displays the aggregated data for Linux\n      subscriptions.</p>"
            }
        }
      }
    },
    "com.amazonaws.licensemanagerlinuxsubscriptions#ValidationException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>The provided input is not valid. Try your request again.</p>",
        "smithy.api#error": "client"
      }
    }
```

```
  }
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package grafana

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/grafana/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Assigns a Grafana Enterprise license to a workspace. To upgrade, you must use
// ENTERPRISE for the licenseType , and pass in a valid Grafana Labs token for the
// grafanaToken . Upgrading to Grafana Enterprise incurs additional fees. For more
// information, see [Upgrade a workspace to Grafana Enterprise].
//
// [Upgrade a workspace to Grafana Enterprise]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-Grafana-Enterprise.html
func (c *Client) AssociateLicense(ctx context.Context, params *AssociateLicenseInput, optFns ...func(*Options))
(*AssociateLicenseOutput, error) {
 if params == nil {
  params = &AssociateLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx,
 "AssociateLicense", params, optFns, c.addOperationAssociateLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*AssociateLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type AssociateLicenseInput struct {

 // The type of license to associate with the workspace.
 //
 // Amazon Managed Grafana workspaces no longer support Grafana Enterprise free
 // trials.
 //
 // This member is required.
 LicenseType types.LicenseType
```

```
 // The ID of the workspace to associate the license with.
 //
 // This member is required.
 WorkspaceId *string

 // A token from Grafana Labs that ties your Amazon Web Services account with a
 // Grafana Labs account. For more information, see [Link your account with Grafana Labs].
 //
 // [Link your account with Grafana Labs]: https://docs.aws.amazon.com/grafana/latest/userguide/upgrade-to-
Grafana-Enterprise.html#AMG-workspace-register-enterprise
 GrafanaToken *string

 noSmithyDocumentSerde
}

type AssociateLicenseOutput
 struct {

 // A structure containing data about the workspace.
 //
 // This member is required.
 Workspace *types.WorkspaceDescription

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationAssociateLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsRestjson1_serializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsRestjson1_deserializeOpAssociateLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "AssociateLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
```

```
}
if err = addSetLoggerMiddleware(stack,
options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
 return err
}
if err = addTimeOffsetBuild(stack,
c); err != nil {
 return err
}
if err = addUserAgentRetryMode(stack, options); err != nil {
 return err
}
```

```
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpAssociateLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opAssociateLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opAssociateLicense(region string)
*awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "AssociateLicense",
 }
```

```
}
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/aws-sdk-go-v2/service/licensemanager/types"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
)

// Checks out the specified license.
//
// If the account that created the license is the same that is performing the
// check out, you must specify the account as the beneficiary.
func (c *Client) CheckoutLicense(ctx context.Context, params *CheckoutLicenseInput, optFns ...func(*Options))
(*CheckoutLicenseOutput, error) {
 if params == nil {
  params = &CheckoutLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckoutLicense", params, optFns,
c.addOperationCheckoutLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckoutLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckoutLicenseInput struct {

 //
 Checkout type.
 //
 // This member is required.
 CheckoutType types.CheckoutType

 // Unique, case-sensitive identifier that you provide to ensure the idempotency of
 // the request.
 //
 // This member is required.
 ClientToken *string
```

```
// License entitlements.
//
// This member is required.
Entitlements []types.EntitlementData

// Key fingerprint identifying the license.
//
// This member is required.
KeyFingerprint *string

// Product SKU.
//
// This member is required.
ProductSKU *string

// License beneficiary.
Beneficiary *string

// Node ID.
NodeId *string

noSmithyDocumentSerde
}

type CheckoutLicenseOutput struct {

// Checkout type.
CheckoutType types.CheckoutType

// Allowed license entitlements.
EntitlementsAllowed []types.EntitlementData

// Date and time at which the license checkout expires.
Expiration *string

// Date and time at which the license checkout is issued.
IssuedAt *string

// Amazon Resource Name (ARN) of the checkout license.
LicenseArn
*string

// License consumption token.
LicenseConsumptionToken *string

// Node ID.
NodeId *string
```

```
 // Signed token.
 SignedToken *string

 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckoutLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckoutLicense{}, middleware.After)
 if err != nil {
  return err
 }
 if err := addProtocolFinalizerMiddlewares(stack, options, "CheckoutLicense"); err != nil {
  return fmt.Errorf("add protocol finalizers: %v", err)
 }

 if err = addlegacyEndpointContextSetter(stack, options); err != nil {
  return err
 }
 if err = addSetLoggerMiddleware(stack,
 options); err != nil {
  return err
 }
 if err = addClientRequestID(stack); err != nil {
  return err
 }
 if err = addComputeContentLength(stack); err != nil {
  return err
 }
 if err = addResolveEndpointMiddleware(stack, options); err != nil {
  return err
 }
 if err = addComputePayloadSHA256(stack); err != nil {
  return err
 }
 if err = addRetry(stack, options); err != nil {
  return err
 }
```

```
 if err = addRawResponseToMetadata(stack); err != nil {
  return err
 }
 if err = addRecordResponseTiming(stack); err != nil {
  return err
 }
 if err = addSpanRetryLoop(stack, options); err != nil {
  return err
 }
 if err = addClientUserAgent(stack, options); err != nil {
  return err
 }
 if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
  return err
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack,
 c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckoutLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckoutLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
```

```
 return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack);
 err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
 return nil
}

func newServiceMetadataMiddleware_opCheckoutLicense(region string) *awsmiddleware.RegisterServiceMetadata
{
 return &awsmiddleware.RegisterServiceMetadata{
  Region:       region,
  ServiceID:    ServiceID,
  OperationName: "CheckoutLicense",
 }
}
CreateLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
```

RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader
ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
GetLicense
Initialize stack step
spanInitializeStart
RegisterServiceMetadata
legacyEndpointContextSetter
SetLogger
OperationInputValidation
spanInitializeEnd
Serialize stack step
spanBuildRequestStart
setOperationInput
ResolveEndpoint
OperationSerializer
Build stack step
ClientRequestID
ComputeContentLength
SetCredentialSourceMiddleware
UserAgent
AddTimeOffsetMiddleware
RecursionDetection
spanBuildRequestEnd
Finalize stack step
spanRetryLoop
Retry
RetryMetricsHeader

ResolveAuthScheme
GetIdentity
ResolveEndpointV2
disableHTTPS
ComputePayloadHash
setLegacyContextSigningOptions
Signing
Deserialize stack step
AddRawResponseToMetadata
ErrorCloseResponseBody
CloseResponseBody
ResponseErrorWrapper
RequestIDRetriever
OperationDeserializer
AddTimeOffsetMiddleware
RecordResponseTiming
RequestResponseLogger
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{
"smithy": "2.0",
"shapes": {

```
    "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException": {
      "type": "structure",
      "members": {
        "message": {
          "target": "smithy.api#String"
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>You don't have sufficient access to perform this action.</p>",
        "smithy.api#error": "client"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider": {
      "type": "structure",
      "members": {
        "DirectoryId": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Directory",
          "traits": {
            "smithy.api#documentation": "<p>The directory ID for an Active Directory identity provider.</p>"
          }
        },
        "ActiveDirectorySettings":
{
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings",
          "traits": {
            "smithy.api#documentation": "<p>The <code>ActiveDirectorySettings</code> resource contains
details about \n\t\t\tthe Active Directory, including network access details such as domain name and IP
\n\t\t\taddresses, and the credential provider for user administration.</p>"
          }
        },
        "ActiveDirectoryType": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType",
          "traits": {
            "smithy.api#documentation": "<p>The type of Active Directory  either a self-managed Active
Directory or an \n\t\t\tAmazon Web Services Managed Active Directory.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#documentation": "<p>Details about an Active Directory identity
 provider.</p>"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectorySettings": {
      "type": "structure",
      "members": {
        "DomainName": {
          "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The domain name for the Active Directory.</p>"
            }
          },
          "DomainIpv4List": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4List",
            "traits": {
              "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the Active
Directory.</p>",
              "smithy.api#length": {
                "min": 1,
                "max": 2
              }
            }
          },
          "DomainCredentialsProvider": {
            "target":
 "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Points to the <code>CredentialsProvider</code> resource that
contains \n\t\t\tinformation about the credential provider for user administration.</p>"
            }
          },
          "DomainNetworkSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>DomainNetworkSettings</code> resource contains an
array of \n\t\t\tsubnets that apply for the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network access and credential details that are needed for
\n\t\t\tuser administration in the Active Directory.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryType":
 {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "SELF_MANAGED",
              "value": "SELF_MANAGED",
              "documentation": "SELF_MANAGED type of Active Directory"
            },
            {
              "name": "AWS_MANAGED",
```

```
                "value": "AWS_MANAGED",
                "documentation": "AWS_MANAGED type of Active Directory"
              }
            ]
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#Arn": {
          "type": "string",
          "traits": {
            "smithy.api#pattern": "^arn:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-z0-9-\\.]{1,63}:[a-zA-Z0-9-\\.]{1,510}/[a-zA-Z0-9-\\.]{1,510}$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUser": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Associates the user to an EC2 instance to utilize user-based subscriptions.</p>\n          <note>\n            <p>Your estimated bill for charges on the number of users and related
```

costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as Pending billing status) in Amazon Web Services Billing. For more information, see Viewing your\n\t\t\t\tmonthly charges in the Amazon Web Services Billing User Guide. \n </note>",
"smithy.api#http":
{
"code": 200,
"method": "POST",
"uri": "/user/AssociateUser"
},
"smithy.api#idempotent": {}
}
},
"com.amazonaws.licensemanagerusersubscriptions#AssociateUserRequest": {
"type": "structure",
"members": {
"Username": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The user name from the identity provider. ",
"smithy.api#required": {}
}
},
"InstanceId": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The ID of the EC2 instance that provides the user-based subscription. ",
"smithy.api#required": {}
}
},
"IdentityProvider": {
"target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
"traits": {
"smithy.api#documentation": " The identity provider for the user. ",
"smithy.api#required": {}
}
},
"Domain": {
"target": "smithy.api#String",
"traits": {
"smithy.api#documentation": " The domain name of the Active Directory that contains information for the user to associate. "
}
},
"Tags": {
"target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
"traits": {

```
                "smithy.api#documentation": "<p>The tags that apply for the user association.</p>"
              }
            }
          },
          "traits": {

        "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#AssociateUserResponse": {
          "type": "structure",
          "members": {
            "InstanceUserSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
              "traits": {
                "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#BoxInteger": {
          "type": "integer"
        },
        "com.amazonaws.licensemanagerusersubscriptions#ConflictException": {
          "type": "structure",
          "members": {
            "message": {
              "target": "smithy.api#String"
             }
          },
          "traits": {
            "smithy.api#documentation": "<p>The request couldn't be completed because it conflicted with the current state of the\n\t\t\tresource.</p>",
            "smithy.api#error": "server"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest"
          },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse"
          },
```

```
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },

        {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Creates a network endpoint for the Remote Desktop Services (RDS) license server.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/license-server/CreateLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the <code>IdentityProvider</code> resource that contains details \n\t\t\tabout a registered identity provider. In the case of Active Directory, that can be \n\t\t\ta self-managed Active Directory or an Amazon Web Services Managed Active Directory that contains user identity details.</p>",
                    "smithy.api#required": {}
                }
            },
```

```
            "LicenseServerSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings",
                 "traits": {
                    "smithy.api#documentation": "<p>The <code>LicenseServerSettings</code> resource to create for the endpoint. The \n\t\t\tsettings include the type of license server and the Secrets Manager secret that \n\t\t\tenables administrators to add or remove users associated with the \n\t\t\tlicense server.</p>",
                    "smithy.api#required": {}
                }
            },
            "Tags": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
                "traits": {
                    "smithy.api#documentation": "<p>The tags that apply for the license server endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider specified in the request.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The ARN of the <code>LicenseServerEndpoint</code> resource.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider": {
        "type": "union",
        "members": {
            "SecretsManagerCredentialsProvider":
```

```
{
            "target": "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider",
            "traits": {
              "smithy.api#documentation": "<p>Identifies the Secrets Manager secret that contains credentials needed for \n\t\t\tuser administration in the Active Directory.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains information about the credential provider for user \n\t\t\tadministration.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"

}
        ],
        "traits": {
          "smithy.api#documentation": "<p>Deletes a <code>LicenseServerEndpoint</code> resource.</p>",
          "smithy.api#http": {
```

```
                "code": 200,
                "method": "POST",
                "uri": "/license-server/DeleteLicenseServerEndpoint"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointRequest": {
        "type": "structure",
        "members": {
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the
<code>LicenseServerEndpoint</code> \n\t\t\tresource to delete.</p>",
                    "smithy.api#required": {}
                }
            },
             "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of License Server that the delete request refers to.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpointResponse": {
        "type": "structure",
        "members": {
            "LicenseServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint",
                "traits": {
                    "smithy.api#documentation": "<p>Shows details from the <code>LicenseServerEndpoint</code>
resource that was deleted.</p>"
                }
            }
        },
         "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider": {
        "type": "operation",
        "input": {
```

```
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Deregisters the Active Directory identity provider from License
Manager user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/DeregisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderRequest":
{
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active Directory identity
provider.</p>"
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```
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
             "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the identity
provider to deregister.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the results of an identity provider
operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}

    }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Directory": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^(d|sd)-[0-9a-f]{10}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser": {
        "type": "operation",
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```
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
             },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Disassociates the user from an EC2 instance providing user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/DisassociateUser"
            },
            "smithy.api#idempotent": {}

    }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserRequest": {
        "type": "structure",
        "members": {
            "Username": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The user name from the Active Directory identity provider for the
```

```
user.</p>"
                }
            },
            "InstanceId": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the EC2 instance which provides user-based
subscriptions.</p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the Active
 Directory identity provider.</p>"
                }
            },
            "InstanceUserArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the user to disassociate
from the EC2 instance.</p>"
                }
            },
            "Domain": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains
information for the user to disassociate.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#DisassociateUserResponse": {
        "type": "structure",
        "members": {
            "InstanceUserSummary":
{
                "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the associate user operation.</p>",
                    "smithy.api#required": {}
                }
            }
        },
```

```
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#DomainNetworkSettings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
              "smithy.api#documentation": "<p>Contains a list of subnets that apply for the Active Directory
domain.</p>",
              "smithy.api#length": {
                "min": 1
              },

    "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains network settings for the Active Directory domain.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Filter": {
        "type": "structure",
        "members": {
          "Attribute": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of an attribute to use as a filter.</p>"
            }
          },
          "Operation": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The type of search (For example, eq, geq, leq)</p>"
            }
          },
          "Value": {
            "target": "smithy.api#String",
            "traits":
 {
              "smithy.api#documentation": "<p>Value of the filter.</p>"
            }
          }
        },
        "traits": {
```

```
            "smithy.api#documentation": "<p>A filter name and value pair that is used to return more specific results from a describe\n\t\t\tor list operation. You can use filters can be used to match a set of resources by specific \n\t\t\tcriteria, such as tags, attributes, or IDs.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#FilterList": {
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Filter"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider": {
          "type": "union",
          "members": {
            "ActiveDirectoryIdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ActiveDirectoryIdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>The <code>ActiveDirectoryIdentityProvider</code> resource contains settings \n\t\t\tand other details about a specific Active Directory identity provider.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Refers to an identity provider.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary": {
          "type": "structure",
          "members": {
            "IdentityProvider": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource contains information about \n\t\t\tan identity provider.</p>",
                "smithy.api#required": {}
              }
            },
            "Settings": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
              "traits": {
                "smithy.api#documentation": "<p>The <code>Settings</code> resource contains details about the registered \n\t\t\tidentity providers product related configuration settings, such as the \n\t\t\tsubnets to provision VPC endpoints.</p>",
                "smithy.api#required": {}
              }
            },
            "Product": {
              "target": "smithy.api#String",
```

```
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
          },
          "Status": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The status of the
identity provider.</p>",
              "smithy.api#required": {}
            }
          },
          "IdentityProviderArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider.</p>"
            }
          },
          "FailureMessage": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The failure message associated with an identity provider.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes an identity provider.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList": {
        "type": "list",
        "member": {

          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary": {
        "type": "structure",
        "members": {
          "InstanceId": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The ID of the EC2 instance, which provides user-based
subscriptions.</p>",
              "smithy.api#required": {}
            }
          },
```

```
            "Status": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status of an EC2 instance resource.</p>",
                "smithy.api#required": {}
              }
            },
            "Products": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#StringList",
               "traits": {
                "smithy.api#documentation": "<p>A list of provided user-based subscription products.</p>",
                "smithy.api#required": {}
              }
            },
            "LastStatusCheckDate": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The date of the last status check.</p>"
              }
            },
            "StatusMessage": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The status message for an EC2 instance.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Describes an EC2 instance providing user-based subscriptions.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList":
{
          "type": "list",
          "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummary"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>",
                "smithy.api#required": {}
              }
            },
```

```
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance that provides user-based
subscriptions.</p>",
                  "smithy.api#required": {}
               }
            },

      "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>The <code>IdentityProvider</code> resource specifies details
\n\t\t\tabout the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "Status": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status of a user associated with an EC2 instance.</p>",
                  "smithy.api#required": {}
               }
            },
            "InstanceUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) that identifies the instance
user.</p>"
                }
            },
            "StatusMessage": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The status message for users of an EC2 instance.</p>"
               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
information for the product subscription.</p>"
               }
            },
            "AssociationDate": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The date a user was associated with an EC2 instance.</p>"
```

```
            }
          },
          "DisassociationDate": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The date a user was disassociated from an EC2 instance.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Describes users of an EC2 instance providing user-based subscriptions.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummary"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#InternalServerException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>An exception occurred with the service.</p>",
          "smithy.api#error": "server",
          "smithy.api#httpError": 500
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^(?:(25[0-5]|2[0-4][0-9]|1[0-9][0-9]|[1-9][0-9]|[0-9])(\\.(?!$)|$)){4}$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#IpV4List": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IpV4"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseManagerUserSubscriptions": {
        "type": "service",
        "version": "2018-05-10",
```

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"operations": [
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#AssociateUser"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#CreateLicenseServerEndpoint"
     },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeleteLicenseServerEndpoint"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DeregisterIdentityProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#DisassociateUser"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstances"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions"
     },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResource"
    },
    {
        "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResource"
```

```
        },
        {

  "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings"
        }
      ],
      "traits": {
        "aws.api#service": {
          "sdkId": "License Manager User Subscriptions",
          "arnNamespace": "license-manager-user-subscriptions",
          "cloudTrailEventSource": "license-manager-user-subscriptions.amazonaws.com"
        },
        "aws.auth#sigv4": {
          "name": "license-manager-user-subscriptions"
        },
        "aws.protocols#restJson1": {},
        "smithy.api#cors": {
          "additionalAllowedHeaders": [
            "*",
            "content-type",
            "x-amz-content-sha256",
            "x-amz-user-agent",
            "x-amzn-platform-id",
            "x-amzn-trace-id",
            "content-length",

       "x-api-key",
            "authorization",
            "x-amz-date",
            "x-amz-security-token",
            "Access-Control-Allow-Headers",
            "Access-Control-Allow-Methods",
            "Access-Control-Allow-Origin"
          ],
          "additionalExposedHeaders": [
            "x-amzn-errortype",
            "x-amzn-requestid",
            "x-amzn-trace-id"
          ]
        },
        "smithy.api#documentation": "<p>With License Manager, you can create user-based subscriptions to
utilize licensed software with\n\t\ta per user subscription fee on Amazon EC2 instances.</p>",
        "smithy.api#title": "AWS License Manager User Subscriptions",
        "smithy.rules#endpointRuleSet": {
          "version": "1.0",
          "parameters": {
            "Region":
```

```
{
                "builtIn": "AWS::Region",
                "required": false,
                "documentation": "The AWS region used to dispatch the request.",
                "type": "String"
            },
            "UseDualStack": {
                "builtIn": "AWS::UseDualStack",
                "required": true,
                "default": false,
                "documentation": "When true, use the dual-stack endpoint. If the configured endpoint does not support dual-stack, dispatching the request MAY return an error.",
                "type": "Boolean"
            },
            "UseFIPS": {
                "builtIn": "AWS::UseFIPS",
                "required": true,
                "default": false,
                "documentation": "When true, send this request to the FIPS-compliant regional endpoint. If the configured endpoint does not have a FIPS compliant endpoint, dispatching the request will return an error.",
                "type": "Boolean"
            },
            "Endpoint": {
                "builtIn": "SDK::Endpoint",
                "required": false,
                "documentation": "Override the endpoint used to send this request",
                "type": "String"
            }
        },
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "isSet",
                        "argv": [
                            {
                                "ref": "Endpoint"
                            }
                        ]
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
```

```
                        {
                            "ref": "UseFIPS"
                        },
                        true
                    ]
                }
            ],
            "error": "Invalid Configuration: FIPS and custom endpoint are not supported",
            "type": "error"
        },
        {
            "conditions": [
                {

                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],
            "error": "Invalid Configuration: Dualstack and custom endpoint are not supported",
            "type": "error"
        },
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            "conditions": [],
            "endpoint": {
                "url": {
                    "ref": "Endpoint"
                },

"properties": {},
                    "headers": {}
                },
                "type": "endpoint"
            }
        ],
        "type": "tree"
    },
    {
        "conditions": [
            {
                "fn": "isSet",
                "argv": [
                    {
                        "ref": "Region"
```

```
                    }
                ]
            }
        ],
        "rules": [
            {
                "conditions": [
                    {
                        "fn": "aws.partition",

                        "argv": [
                            {
                                "ref": "Region"
                            }
                        ],
                        "assign": "PartitionResult"
                    }
                ],
                "rules": [
                    {
                        "conditions": [
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseFIPS"
                                    },

true
                                ]
                            },
                            {
                                "fn": "booleanEquals",
                                "argv": [
                                    {
                                        "ref": "UseDualStack"
                                    },
                                    true
                                ]
                            }
                        ],
                        "rules": [
                            {
                                "conditions": [
                                    {

"fn": "booleanEquals",
                                        "argv": [
```

```
                    true,
                    {
                      "fn": "getAttr",
                      "argv": [
                        {
                          "ref": "PartitionResult"
                        },
                        "supportsFIPS"
                      ]
                    }
                  ]
                },

              {
                  "fn": "booleanEquals",
                  "argv": [
                    true,
                    {
                      "fn": "getAttr",
                      "argv": [
                        {
                          "ref": "PartitionResult"
                        },
                        "supportsDualStack"
                      ]
                    }

            ]
                }
              ],
              "rules": [
                {
                  "conditions": [],
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions-
fips.{Region}.{PartitionResult#dualStackDnsSuffix}",
                    "properties": {},
                    "headers": {}
                  },
                  "type": "endpoint"
                }

  ],
                "type": "tree"
              },
              {
                "conditions": [],
                "error": "FIPS and DualStack are enabled, but this partition does not support one or
```

```
both",
                "type": "error"
              }
            ],
            "type": "tree"
          },
          {
            "conditions": [
              {
                "fn": "booleanEquals",
                "argv": [

 {
                    "ref": "UseFIPS"
                  },
                  true
                ]
              }
            ],
            "rules": [
              {
                "conditions": [
                  {
                    "fn": "booleanEquals",
                    "argv": [
                      {
                        "fn": "getAttr",
                        "argv": [

                {
                            "ref": "PartitionResult"
                          },
                          "supportsFIPS"
                        ]
                      },
                      true
                    ]
                  }
                ],
                "rules": [
                  {
                    "conditions": [],
                    "endpoint": {

          "url": "https://license-manager-user-subscriptions-fips.{Region}.{PartitionResult#dnsSuffix}",
                      "properties": {},
                      "headers": {}
                    },
```

```
                        "type": "endpoint"
                    }
                ],
                "type": "tree"
            },
            {
                "conditions": [],
                "error": "FIPS is enabled but this partition does not support FIPS",
                "type": "error"

}
            ],
            "type": "tree"
        },
        {
            "conditions": [
                {
                    "fn": "booleanEquals",
                    "argv": [
                        {
                            "ref": "UseDualStack"
                        },
                        true
                    ]
                }
            ],
            "rules": [
                {

    "conditions": [
                        {
                            "fn": "booleanEquals",
                            "argv": [
                                true,
                                {
                                    "fn": "getAttr",
                                    "argv": [
                                        {
                                            "ref": "PartitionResult"
                                        },
                                        "supportsDualStack"
                                    ]

     }
                        ]
                    }
                ],
                "rules": [
```

```
                                    {
                                        "conditions": [],
                                        "endpoint": {
                                            "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dualStackDnsSuffix}",
                                            "properties": {},
                                            "headers": {}
                                        },
                                        "type": "endpoint"
                                    }

                                ],
                                    "type": "tree"
                                },
                                {
                                    "conditions": [],
                                    "error": "DualStack is enabled but this partition does not support DualStack",
                                    "type": "error"
                                }
                            ],
                            "type": "tree"
                        },
                        {
                            "conditions": [],
                            "endpoint": {
                                "url": "https://license-manager-user-
subscriptions.{Region}.{PartitionResult#dnsSuffix}",

                        "properties": {},
                                "headers": {}
                            },
                            "type": "endpoint"
                        }
                    ],
                    "type": "tree"
                }
            ],
            "type": "tree"
        },
        {
            "conditions": [],
            "error": "Invalid Configuration: Missing Region",
            "type": "error"
        }
    ]
},
"smithy.rules#endpointTests": {
    "testCases": [
```

```
                {
                  "documentation": "For region us-east-1 with FIPS enabled and DualStack enabled",
                  "expect":
{
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-fips.us-east-1.api.aws"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": true,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region us-east-1 with FIPS enabled and DualStack disabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions-fips.us-east-1.amazonaws.com"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",

        "UseFIPS": true,
                    "UseDualStack": false
                  }
                },
                {
                  "documentation": "For region us-east-1 with FIPS disabled and DualStack enabled",
                  "expect": {
                    "endpoint": {
                      "url": "https://license-manager-user-subscriptions.us-east-1.api.aws"
                    }
                  },
                  "params": {
                    "Region": "us-east-1",
                    "UseFIPS": false,
                    "UseDualStack": true
                  }
                },
                {
                  "documentation": "For region us-east-1 with FIPS disabled and DualStack disabled",
                  "expect": {
                    "endpoint":
{
                      "url": "https://license-manager-user-subscriptions.us-east-1.amazonaws.com"
                    }
```

```
      },
      "params": {
        "Region": "us-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-
1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS":
true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions.cn-north-1.api.amazonwebservices.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
        "UseDualStack": true
      }
```

```
    },
    {
      "documentation": "For region cn-north-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.cn-north-1.amazonaws.com.cn"
        }
      },
      "params": {
        "Region": "cn-north-1",
        "UseFIPS": false,
         "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.api.aws"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint":
{
          "url": "https://license-manager-user-subscriptions-fips.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": true,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.api.aws"
        }
      },
```

```
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
         "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-gov-east-1 with FIPS disabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions.us-gov-east-1.amazonaws.com"
        }
      },
      "params": {
        "Region": "us-gov-east-1",
        "UseFIPS": false,
        "UseDualStack": false
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack enabled",
      "expect": {
        "error": "FIPS
and DualStack are enabled, but this partition does not support one or both"
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": true
      }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS enabled and DualStack disabled",
      "expect": {
        "endpoint": {
          "url": "https://license-manager-user-subscriptions-fips.us-iso-east-1.c2s.ic.gov"
        }
      },
      "params": {
        "Region": "us-iso-east-1",
        "UseFIPS": true,
        "UseDualStack": false

  }
    },
    {
      "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack enabled",
      "expect": {
```

```
            "error": "DualStack is enabled but this partition does not support DualStack"
          },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-iso-east-1 with FIPS disabled and DualStack disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions.us-iso-east-1.c2s.ic.gov"
            }

      },
          "params": {
            "Region": "us-iso-east-1",
            "UseFIPS": false,
            "UseDualStack": false
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack enabled",
          "expect": {
            "error": "FIPS and DualStack are enabled, but this partition does not support one or both"
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": true
          }
        },
        {
          "documentation": "For region us-isob-east-1 with FIPS enabled and DualStack
disabled",
          "expect": {
            "endpoint": {
              "url": "https://license-manager-user-subscriptions-fips.us-isob-east-1.sc2s.sgov.gov"
            }
          },
          "params": {
            "Region": "us-isob-east-1",
            "UseFIPS": true,
            "UseDualStack": false
          }
        },
        {
```

```
                "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack enabled",
                "expect": {
                  "error": "DualStack is enabled but this partition does not support DualStack"
                },
                "params": {
                  "Region": "us-isob-east-1",

  "UseFIPS": false,
                  "UseDualStack": true
                }
              },
              {
                "documentation": "For region us-isob-east-1 with FIPS disabled and DualStack disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://license-manager-user-subscriptions.us-isob-east-1.sc2s.sgov.gov"
                  }
                },
                "params": {
                  "Region": "us-isob-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false
                }
              },
              {
                "documentation": "For custom endpoint with region set and fips disabled and dualstack disabled",
                "expect": {

                 "endpoint": {
                    "url": "https://example.com"
                  }
                },
                "params": {
                  "Region": "us-east-1",
                  "UseFIPS": false,
                  "UseDualStack": false,
                  "Endpoint": "https://example.com"
                }
              },
              {
                "documentation": "For custom endpoint with region not set and fips disabled and dualstack
disabled",
                "expect": {
                  "endpoint": {
                    "url": "https://example.com"
                  }
                },
                "params": {
```

```
                "UseFIPS": false,
                "UseDualStack":
false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips enabled and dualstack disabled",
              "expect": {
                "error": "Invalid Configuration: FIPS and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": true,
                "UseDualStack": false,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "For custom endpoint with fips disabled and dualstack enabled",
              "expect": {
                "error": "Invalid Configuration:
Dualstack and custom endpoint are not supported"
              },
              "params": {
                "Region": "us-east-1",
                "UseFIPS": false,
                "UseDualStack": true,
                "Endpoint": "https://example.com"
              }
            },
            {
              "documentation": "Missing region",
              "expect": {
                "error": "Invalid Configuration: Missing Region"
              }
            }
          ],
          "version": "1.0"
        }
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServer": {
      "type": "structure",
      "members": {
        "ProvisioningStatus": {
          "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
```

```
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS
\n\t\t\tlicense server.</p>"
                }
            },
            "HealthStatus": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The health status of the RDS license server.</p>"
                }
            },
            "Ipv4Address": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A list of domain IPv4 addresses that are used for the RDS
\n\t\t\tlicense server.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Information
 about a Remote Desktop Services (RDS) license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint": {
        "type": "structure",
        "members": {
            "IdentityProviderArn": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider that's
associated with \n\t\t\tthe RDS license server endpoint.</p>"
                }
            },
            "ServerType": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
                "traits": {
                    "smithy.api#documentation": "<p>The type of license server.</p>"
                }
            },
            "ServerEndpoint": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint",

  "traits": {
                    "smithy.api#documentation": "<p>The <code>ServerEndpoint</code> resource contains the network
\n\t\t\taddress of the RDS license server endpoint.</p>"
                }
            },
```

```
            "StatusMessage": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The message associated with the provisioning status, if there is
one.</p>"
                }
            },
            "LicenseServerEndpointId": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId",
                "traits": {
                    "smithy.api#documentation": "<p>The ID of the license server endpoint.</p>"
                }
            },
            "LicenseServerEndpointArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits":
 {
                    "smithy.api#documentation": "<p>The ARN of the <code>ServerEndpoint</code> resource for the
RDS \n\t\t\tlicense server.</p>"
                }
            },
            "LicenseServerEndpointProvisioningStatus": {
                "target":
"com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus",
                "traits": {
                    "smithy.api#documentation": "<p>The current state of the provisioning process for the RDS license
\n\t\t\tserver endpoint</p>"
                }
            },
            "LicenseServers": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList",
                "traits": {
                    "smithy.api#documentation": "<p>An array of <code>LicenseServer</code> resources that represent
the \n\t\t\tlicense servers that are accessed through this endpoint.</p>"
                }
            },

           "CreationTime": {
                "target": "smithy.api#Timestamp",
                "traits": {
                    "smithy.api#documentation": "<p>The timestamp when License Manager created the license server
endpoint.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Contains details about a network endpoint for a Remote Desktop
Services (RDS) \n\t\t\tlicense server.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointId": {
        "type": "string"
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpoint"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointProvisioningStatus": {

  "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "PROVISIONING",
              "value": "PROVISIONING",
              "documentation": ""
            },
            {
              "name": "PROVISIONING_FAILED",
              "value": "PROVISIONING_FAILED",
              "documentation": ""
            },
            {
              "name": "PROVISIONED",
              "value": "PROVISIONED",
              "documentation": ""
            },
            {
              "name": "DELETING",
              "value": "DELETING",
              "documentation": ""
            },
            {
              "name": "DELETION_FAILED",
              "value": "DELETION_FAILED",
              "documentation": ""

           },
            {
              "name": "DELETED",
              "value": "DELETED",
              "documentation": ""
            }
          ]
```

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        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerHealthStatus": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "HEALTHY",
              "value": "HEALTHY",
              "documentation": ""
            },
            {
              "name": "UNHEALTHY",
              "value": "UNHEALTHY",
              "documentation": ""
            },
            {
              "name": "NOT_APPLICABLE",
              "value": "NOT_APPLICABLE",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerList": {
        "type": "list",
        "member": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServer"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#LicenseServerSettings": {
        "type": "structure",
        "members": {
          "ServerType": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerType",
            "traits": {
              "smithy.api#documentation": "<p>The type of license server.</p>",
              "smithy.api#required": {}
            }
          },
          "ServerSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServerSettings",
            "traits": {
              "smithy.api#documentation": "<p>The <code>ServerSettings</code> resource contains the settings
for
 your \n\t\t\tserver.</p>",
              "smithy.api#required": {}
            }
```

```
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The settings to configure your license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProviders": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {

            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the Active Directory identity providers for user-based
subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/ListIdentityProviders"
             },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
```

```
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "IdentityProviderSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersRequest": {
        "type": "structure",
        "members": {
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use
 the following filters to streamline results:</p>\n        <ul>\n          <li>\n            <p>Product</p>\n          </li>\n
        <li>\n            <p>DirectoryId</p>\n          </li>\n        </ul>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListIdentityProvidersResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummaryList",

          "traits": {
              "smithy.api#documentation": "<p>An array of <code>IdentityProviderSummary</code> resources
that contain \n\t\t\tdetails about the Active Directory identity providers that meet the request criteria.</p>",
              "smithy.api#required": {}
            }
          },
```

```
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListInstances": {
      "type": "operation",
       "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },

    {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
      ],
      "traits": {
        "smithy.api#documentation": "<p>Lists the EC2 instances providing user-based subscriptions.</p>",
        "smithy.api#http": {
```

```
            "code": 200,
            "method": "POST",
            "uri": "/instance/ListInstances"
          },
          "smithy.api#paginated": {
            "inputToken": "NextToken",
            "outputToken": "NextToken",
            "pageSize": "MaxResults",
            "items": "InstanceSummaries"
          }
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesRequest": {
        "type": "structure",
        "members":
{
          "MaxResults": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
            "traits": {
              "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
            }
          },
          "Filters": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
            "traits": {
              "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n            <p>Status</p>\n          </li>\n
        <li>\n            <p>InstanceId</p>\n          </li>\n        </ul>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListInstancesResponse": {
        "type": "structure",
        "members": {
          "InstanceSummaries": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceSummaryList",
```

```
            "traits": {
              "smithy.api#documentation": "<p>An array of <code>InstanceSummary</code> resources that contain details \n\t\t\tabout the instances that provide user-based subscriptions and also meet the \n\t\t\trequest criteria.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next
 token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpoints": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest"
        },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse"
        },
        "errors": [
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
           },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
          },
          {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
          }
        ],
        "traits": {
```

```
            "smithy.api#documentation": "<p>List the Remote Desktop Services (RDS) License Server endpoints
</p>",
            "smithy.api#http": {
               "code": 200,
               "method": "POST",
               "uri": "/license-server/ListLicenseServerEndpoints"
            },

          "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "LicenseServerEndpoints"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsRequest": {
         "type": "structure",
         "members": {
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>",
                  "smithy.api#range": {
                     "min": 1,
                     "max": 100
                  }
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                  "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n            <li>\n               <p>IdentityProviderArn</p>\n            </li>\n         </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
\n\tfrom a previously truncated response.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
```

```
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListLicenseServerEndpointsResponse": {
      "type": "structure",
      "members": {
        "LicenseServerEndpoints": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#LicenseServerEndpointList",
           "traits": {
             "smithy.api#documentation": "<p>An array of <code>LicenseServerEndpoint</code> resources that \n\t\t\tcontain detailed information about the RDS License Servers that meet \n\t\t\tthe request criteria.</p>"
          }
        },
        "NextToken": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
          }
        }
      },
      "traits": {
        "smithy.api#output": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptions": {
      "type":
 "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
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            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Lists the user-based subscription products available from an identity
provider.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/user/ListProductSubscriptions"
            },
            "smithy.api#paginated": {
                "inputToken": "NextToken",
                "outputToken": "NextToken",
                "pageSize": "MaxResults",
                "items": "ProductUserSummaries"
            }
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsRequest":
{
        "type": "structure",
        "members": {
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>"
                }
            },
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                    "smithy.api#required": {}
                }
            },
            "MaxResults": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
                 "traits": {
                    "smithy.api#documentation": "<p>The maximum number of results to return from a single
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request.</p>"
                }
            },
            "Filters": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
                "traits": {
                    "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n
<ul>\n          <li>\n          <p>Status</p>\n          </li>\n          <li>\n          <p>Username</p>\n
</li>\n          <li>\n          <p>Domain</p>\n          </li>\n          </ul>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>A token to specify where to start paginating.
 This is the nextToken \n\tfrom a previously truncated response.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListProductSubscriptionsResponse": {
        "type": "structure",
        "members": {
            "ProductUserSummaries": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList",
                "traits": {
                    "smithy.api#documentation": "<p>Metadata that describes the list product subscriptions
operation.</p>"
                }
            },
            "NextToken": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't
empty, \n\tthere are additional elements that the service
 hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResource": {
        "type": "operation",
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```
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Returns the list of tags for the specified resource.</p>",
            "smithy.api#http": {
                "method": "GET",
                "uri": "/tags/{ResourceArn}"
            },
            "smithy.api#readonly": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource whose tags
you want to retrieve.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

         }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ListTagsForResourceResponse": {
        "type": "structure",
        "members": {
```

```
        "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
                "smithy.api#documentation": "<p>The tags for the specified resource.</p>"
            }
        }
    },
    "traits": {
        "smithy.api#output": {}
    }
},
"com.amazonaws.licensemanagerusersubscriptions#ListUserAssociations": {
    "type": "operation",
    "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest"
    },
    "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse"
     },
    "errors": [
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
        },
        {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
         }
    ],
    "traits": {
        "smithy.api#documentation": "<p>Lists user associations for an identity provider.</p>",
        "smithy.api#http": {
            "code": 200,
            "method": "POST",
            "uri": "/user/ListUserAssociations"
```

```
            },
            "smithy.api#paginated": {
               "inputToken": "NextToken",
               "outputToken": "NextToken",
               "pageSize": "MaxResults",
               "items": "InstanceUserSummaries"
            }
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsRequest": {
         "type": "structure",
         "members": {
            "InstanceId": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The ID of the EC2 instance, which
 provides user-based subscriptions.</p>",
                  "smithy.api#required": {}
               }
            },
            "IdentityProvider": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
               "traits": {
                  "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
                  "smithy.api#required": {}
               }
            },
            "MaxResults": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#BoxInteger",
               "traits": {
                  "smithy.api#documentation": "<p>The maximum number of results to return from a single
request.</p>"
               }
            },
            "Filters": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#FilterList",
               "traits": {

      "smithy.api#documentation": "<p>You can use the following filters to streamline results:</p>\n        <ul>\n
   <li>\n            <p>Status</p>\n          </li>\n          <li>\n            <p>Username</p>\n          </li>\n
<li>\n            <p>Domain</p>\n          </li>\n        </ul>"
               }
            },
            "NextToken": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>A token to specify where to start paginating. This is the nextToken
 \n\tfrom a previously truncated response.</p>"
```

```
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ListUserAssociationsResponse": {
        "type": "structure",
        "members": {
          "InstanceUserSummaries": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#InstanceUserSummaryList",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the list user association operation.</p>"
            }
          },
          "NextToken": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The next token used for paginated responses. When this field isn't empty, \n\tthere are additional elements that the service hasn't included in this request. Use this token \n\t\twith the next request to retrieve additional objects.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary": {
        "type": "structure",
        "members": {
          "Username":
{
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The user name from the identity provider for this product user.</p>",
              "smithy.api#required": {}
            }
          },
          "Product": {
            "target": "smithy.api#String",
            "traits": {
              "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>",
              "smithy.api#required": {}
            }
```

```
        },
        "IdentityProvider": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
          "traits": {
            "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
            "smithy.api#required": {}
          }
        },
        "Status": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status of a product for this user.</p>",
            "smithy.api#required": {}
          }
        },
        "ProductUserArn": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
          "traits": {
            "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) for this product user.</p>"
          }
        },
        "StatusMessage": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The status message for a product for this user.</p>"
          }
        },
        "Domain": {
          "target": "smithy.api#String",
          "traits": {

        "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user information for the product subscription.</p>"
          }
        },
        "SubscriptionStartDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The start date of a subscription.</p>"
          }
        },
        "SubscriptionEndDate": {
          "target": "smithy.api#String",
          "traits": {
            "smithy.api#documentation": "<p>The end date of a subscription.</p>"
          }
        }
      },
```

```
        "traits": {
            "smithy.api#documentation": "<p>A summary of the user-based subscription products for a specific
user.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummaryList": {
        "type":
 "list",
        "member": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings": {
        "type": "structure",
        "members": {
            "RdsSalCredentialsProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#CredentialsProvider",
                "traits": {
                    "smithy.api#documentation": "<p>The <code>CredentialsProvider</code> resource contains a
reference to \n\t\t\tthe credentials provider that's used for RDS license server user administration.</p>",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Server settings that are specific to a Remote Desktop Services (RDS)
license server.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProvider":
 {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
                "target":
 "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Registers an identity provider for user-based subscriptions.</p>",
            "smithy.api#http": {
                "code": 200,
                "method": "POST",
                "uri": "/identity-provider/RegisterIdentityProvider"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {

    "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
                "traits": {
                    "smithy.api#documentation": "<p>An object that specifies details for the identity provider to
register.</p>",
                    "smithy.api#required": {}
                }
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n        </p>",
                    "smithy.api#required": {}
                }
            },
            "Settings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Settings",
```

```
            "traits":
{
                "smithy.api#documentation": "<p>The registered identity providers product related configuration
\n\t\t\tsettings such as the subnets to provision VPC endpoints.</p>"
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation": "<p>The tags that apply to the identity provider's registration.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#RegisterIdentityProviderResponse": {
        "type": "structure",
        "members": {
          "IdentityProviderSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
            "traits": {
              "smithy.api#documentation":
"<p>Metadata that describes the results of an identity provider operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceArn": {
        "type": "string",
        "traits": {
          "smithy.api#pattern": "^arn:([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-\\.]{1,63}):([a-z0-9-
\\.]{1,63}):([a-z0-9-\\.]{1,510})/([a-z0-9-\\.]{1,510})$"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException": {
        "type": "structure",
        "members": {
          "message": {
            "target": "smithy.api#String"
          }
        },
        "traits": {
```

```
            "smithy.api#documentation": "<p>The resource couldn't be found.</p>",

        "smithy.api#error": "client",
            "smithy.api#httpError": 404
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecretsManagerCredentialsProvider": {
          "type": "structure",
          "members": {
            "SecretId": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The ID of the Secrets Manager secret that contains
credentials.</p>",
                "smithy.api#length": {
                  "min": 1
                }
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>Contains a credentials secret that's stored in Secrets Manager.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup": {
          "type": "string",
          "traits": {
            "smithy.api#length": {

           "min": 5,
              "max": 200
            },
            "smithy.api#pattern": "^sg-(([0-9a-z]{8})|([0-9a-z]{17}))$"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#ServerEndpoint": {
          "type": "structure",
          "members": {
            "Endpoint": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The network address of the endpoint.</p>"
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>A network endpoint through which you can access one or more
servers.</p>"
```

```
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerSettings": {
        "type": "union",
        "members": {
          "RdsSalSettings": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#RdsSalSettings",
             "traits": {
               "smithy.api#documentation": "<p>The <code>RdsSalSettings</code> resource contains settings to
configure \n\t\t\ta specific Remote Desktop Services (RDS) license server.</p>"
            }
          }
        },
        "traits": {
          "smithy.api#documentation": "<p>Contains settings for a specific server.</p>"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServerType": {
        "type": "string",
        "traits": {
          "smithy.api#enum": [
            {
              "name": "RDS_SAL",
              "value": "RDS_SAL",
              "documentation": ""
            }
          ]
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException": {
        "type": "structure",
        "members": {
          "message": {

  "target": "smithy.api#String"
            }
        },
        "traits": {
          "smithy.api#documentation": "<p>The request failed because a service quota is exceeded.</p>",
          "smithy.api#error": "client"
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Settings": {
        "type": "structure",
        "members": {
          "Subnets": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
            "traits": {
```

```
                "smithy.api#documentation": "<p>The subnets defined for the registered identity provider.</p>",
                "smithy.api#length": {
                  "min": 1
                },
                "smithy.api#required": {}
              }
            },
            "SecurityGroupId": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",

             "traits": {
                "smithy.api#documentation": "<p>A security group ID that allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoint for activation servers.</p>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#documentation": "<p>The registered identity providers product related configuration settings such as the\n\t\t\tsubnets to provision VPC endpoints, and the security group ID that is associated with the VPC\n\t\t\tendpoints. The security group should permit inbound TCP port 1688 communication from resources\n\t\t\tin the VPC.</p>"
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscription": {
          "type": "operation",
          "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest"
           },
          "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse"
          },
          "errors": [
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
```

```
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Starts a product subscription for a user with the specified identity provider.</p>\n        <note>\n        <p>Your estimated bill for charges on the number of users and related costs will take 48\n\t\t\thours to appear for billing periods that haven't closed (marked as <b>Pending</b> billing status) in Amazon Web Services Billing. For more information, see <a href=\"https://docs.aws.amazon.com/awsaccountbilling/latest/aboutv2/invoice.html\">Viewing your\n\t\t\t\tmonthly charges</a> in the <i>Amazon Web Services Billing User Guide</i>.</p>\n        </note>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/StartProductSubscription"
            }

    }
     },
     "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionRequest": {
       "type": "structure",
       "members": {
         "Username": {
           "target": "smithy.api#String",
           "traits": {
             "smithy.api#documentation": "<p>The user name from the identity provider of the user.</p>",
             "smithy.api#required": {}
           }
         },
         "IdentityProvider": {
           "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
           "traits": {
             "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>",
             "smithy.api#required": {}
           }
         },
         "Product": {
           "target": "smithy.api#String",
           "traits": {

  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n        <p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n</p>",
```

```
                "smithy.api#required": {}
              }
            },
            "Domain": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user for whom to start the product \n\t\t\tsubscription.</p>"
              }
            },
            "Tags": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
              "traits": {
                "smithy.api#documentation": "<p>The tags that apply to the product subscription.</p>"
              }

  }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StartProductSubscriptionResponse": {
        "type": "structure",
        "members": {
          "ProductUserSummary": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
            "traits": {
              "smithy.api#documentation": "<p>Metadata that describes the start product subscription operation.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscription": {
        "type": "operation",
        "input": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest"

    },
        "output": {
          "target": "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse"
        },
        "errors": [
```

```
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ConflictException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ServiceQuotaExceededException"
            },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"

    },
            {
              "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
          ],
          "traits": {
            "smithy.api#documentation": "<p>Stops a product subscription for a user with the specified identity
provider.</p>",
            "smithy.api#http": {
              "code": 200,
              "method": "POST",
              "uri": "/user/StopProductSubscription"
            }
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionRequest": {
          "type": "structure",
          "members": {
            "Username": {
              "target": "smithy.api#String",
              "traits": {
                "smithy.api#documentation": "<p>The user name from the identity provider for the user.</p>"
              }
            },
            "IdentityProvider": {
              "target":
 "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider",
              "traits": {
                "smithy.api#documentation": "<p>An object that specifies details for the identity provider.</p>"
              }
```

```
            },
            "Product": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n
<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> |
<code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> |
\n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
               }
            },
            "ProductUserArn": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
               "traits": {
                  "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the product user.</p>"

               }
            },
            "Domain": {
               "target": "smithy.api#String",
               "traits": {
                  "smithy.api#documentation": "<p>The domain name of the  Active Directory that contains the user
for whom to stop the product \n\t\t\tsubscription.</p>"
               }
            }
         },
         "traits": {
            "smithy.api#input": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StopProductSubscriptionResponse": {
         "type": "structure",
         "members": {
            "ProductUserSummary": {
               "target": "com.amazonaws.licensemanagerusersubscriptions#ProductUserSummary",
               "traits": {
                  "smithy.api#documentation": "<p>Metadata that describes the start product subscription
operation.</p>",
                  "smithy.api#required": {}
               }

   }
         },
         "traits": {
            "smithy.api#output": {}
         }
      },
      "com.amazonaws.licensemanagerusersubscriptions#StringList": {
         "type": "list",
```

```
      "member": {
        "target": "smithy.api#String"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnet": {
      "type": "string",
      "traits": {
        "smithy.api#pattern": "^subnet-[a-z0-9]{8,17}"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#Subnets": {
      "type": "list",
      "member": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#Subnet"
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagKeyList": {
      "type": "list",
      "member": {
        "target": "smithy.api#String"
      },
      "traits": {
        "smithy.api#length": {

"min": 0,
          "max": 50
        },
        "smithy.api#sensitive": {}
      }
    },
    "com.amazonaws.licensemanagerusersubscriptions#TagResource": {
      "type": "operation",
      "input": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest"
      },
      "output": {
        "target": "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse"
      },
      "errors": [
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
        },
        {
          "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
        }
```

```
        ],
        "traits": {
          "smithy.api#documentation":
"<p>Adds tags to a resource.</p>",
          "smithy.api#http": {
            "method": "PUT",
            "uri": "/tags/{ResourceArn}"
          },
          "smithy.api#idempotent": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceRequest": {
        "type": "structure",
        "members": {
          "ResourceArn": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
            "traits": {
              "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to tag.</p>",
              "smithy.api#httpLabel": {},
              "smithy.api#required": {}
            }
          },
          "Tags": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#Tags",
            "traits": {
              "smithy.api#documentation":
"<p>The tags to apply to the specified resource.</p>",
              "smithy.api#required": {}
            }
          }
        },
        "traits": {
          "smithy.api#input": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#TagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
          "smithy.api#output": {}
        }
      },
      "com.amazonaws.licensemanagerusersubscriptions#Tags": {
        "type": "map",
        "key": {
          "target": "smithy.api#String"
        },
```

```
        "value": {
            "target": "smithy.api#String"
        },
        "traits": {
            "smithy.api#length": {
                "min": 0,
                "max": 50
            },
            "smithy.api#sensitive": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException":
{
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>The request was denied because of request throttling. Retry the
request.</p>",
            "smithy.api#error": "client"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResource": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest"
        },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {

             "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceNotFoundException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Removes tags from a resource.</p>",
            "smithy.api#http": {
                "method": "DELETE",
                "uri": "/tags/{ResourceArn}"
            },
```

```
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceRequest": {
        "type": "structure",
        "members": {
            "ResourceArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ResourceArn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the resource that you want
to remove tags from.</p>",
                    "smithy.api#httpLabel": {},
                    "smithy.api#required": {}

        }
            },
            "TagKeys": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#TagKeyList",
                "traits": {
                    "smithy.api#documentation": "<p>The tag keys to remove from the resource.</p>",
                    "smithy.api#httpQuery": "tagKeys",
                    "smithy.api#required": {}
                }
            }
        },
        "traits": {
            "smithy.api#input": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UntagResourceResponse": {
        "type": "structure",
        "members": {},
        "traits": {
            "smithy.api#output": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettings": {
        "type": "operation",
        "input": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest"
         },
        "output": {
            "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse"
        },
        "errors": [
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#AccessDeniedException"
            },
```

```
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#InternalServerException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ThrottlingException"
            },
            {
                "target": "com.amazonaws.licensemanagerusersubscriptions#ValidationException"
            }
        ],
        "traits": {
            "smithy.api#documentation": "<p>Updates additional product configuration settings for the registered identity\n\t\t\tprovider.</p>",
            "smithy.api#http": {

      "code": 200,
                "method": "POST",
                "uri": "/identity-provider/UpdateIdentityProviderSettings"
            },
            "smithy.api#idempotent": {}
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsRequest": {
        "type": "structure",
        "members": {
            "IdentityProvider": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProvider"
            },
            "Product": {
                "target": "smithy.api#String",
                "traits": {
                    "smithy.api#documentation": "<p>The name of the user-based subscription product.</p>\n<p>Valid values: <code>VISUAL_STUDIO_ENTERPRISE</code> | <code>VISUAL_STUDIO_PROFESSIONAL</code> | <code>OFFICE_PROFESSIONAL_PLUS</code> | \n<code>REMOTE_DESKTOP_SERVICES</code>\n         </p>"
                }
            },

            "IdentityProviderArn": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Arn",
                "traits": {
                    "smithy.api#documentation": "<p>The Amazon Resource Name (ARN) of the identity provider to update.</p>"
                }
            },
            "UpdateSettings": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings",
                "traits": {
```

```
                "smithy.api#documentation": "<p>Updates the registered identity providers product related
configuration settings. You can\n\t\t\tupdate any combination of settings in a single operation such as the:</p>\n
<ul>\n            <li>\n                <p>Subnets which you want to add to provision VPC endpoints.</p>\n            </li>\n
        <li>\n                <p>Subnets which you want to remove the VPC endpoints from.</p>\n            </li>\n
<li>\n                <p>Security
 group ID which permits traffic to the VPC endpoints.</p>\n            </li>\n        </ul>",
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#input": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateIdentityProviderSettingsResponse": {
          "type": "structure",
          "members": {
            "IdentityProviderSummary": {
              "target": "com.amazonaws.licensemanagerusersubscriptions#IdentityProviderSummary",
              "traits": {
                "smithy.api#required": {}
              }
            }
          },
          "traits": {
            "smithy.api#output": {}
          }
        },
        "com.amazonaws.licensemanagerusersubscriptions#UpdateSettings": {
          "type": "structure",
          "members": {
            "AddSubnets": {

           "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                  "smithy.api#documentation": "<p>The ID of one or more subnets in which License Manager will
create a VPC endpoint for products that\n\t\t\trequire connectivity to activation servers.</p>",
                  "smithy.api#required": {}
                }
              },
              "RemoveSubnets": {
                "target": "com.amazonaws.licensemanagerusersubscriptions#Subnets",
                "traits": {
                  "smithy.api#documentation": "<p>The ID of one or more subnets to remove.</p>",
                  "smithy.api#required": {}
                }
              },
              "SecurityGroupId": {
```

```
                "target": "com.amazonaws.licensemanagerusersubscriptions#SecurityGroup",
                "traits": {
                    "smithy.api#documentation": "<p>A security group ID that
 allows inbound TCP port 1688 communication between resources in\n\t\t\tyour VPC and the VPC endpoints for
activation servers.</p>"
                }
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>Updates the registered identity providers product related configuration
settings such as\n\t\t\tthe subnets to provision VPC endpoints.</p>"
        }
    },
    "com.amazonaws.licensemanagerusersubscriptions#ValidationException": {
        "type": "structure",
        "members": {
            "message": {
                "target": "smithy.api#String"
            }
        },
        "traits": {
            "smithy.api#documentation": "<p>A parameter is not valid.</p>",
            "smithy.api#error": "client"
        }
    }
  }
}
```


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limitations under the License.
ListReceivedLicenses
Initialize stack step
spanInitializeStart

```
 RegisterServiceMetadata
 legacyEndpointContextSetter
 SetLogger
 spanInitializeEnd
Serialize stack step
 spanBuildRequestStart
 setOperationInput
 ResolveEndpoint
 OperationSerializer
Build stack step
 ClientRequestID
 ComputeContentLength
 SetCredentialSourceMiddleware
 UserAgent
 AddTimeOffsetMiddleware
 RecursionDetection
 spanBuildRequestEnd
Finalize stack step
 spanRetryLoop
 Retry
 RetryMetricsHeader
 ResolveAuthScheme
 GetIdentity
 ResolveEndpointV2
 disableHTTPS
 ComputePayloadHash
 setLegacyContextSigningOptions
 Signing
Deserialize stack step
 AddRawResponseToMetadata
 ErrorCloseResponseBody
 CloseResponseBody
 ResponseErrorWrapper
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
// Code generated by smithy-go-codegen DO NOT EDIT.

package licensemanager

import (
 "context"
 "fmt"
 awsmiddleware "github.com/aws/aws-sdk-go-v2/aws/middleware"
 "github.com/aws/smithy-go/middleware"
 smithyhttp "github.com/aws/smithy-go/transport/http"
```

```
)

// Checks in the specified license. Check in a license when it is no longer in use.
func (c *Client) CheckInLicense(ctx context.Context, params *CheckInLicenseInput, optFns ...func(*Options))
(*CheckInLicenseOutput, error) {
 if params == nil {
  params = &CheckInLicenseInput{}
 }

 result, metadata, err := c.invokeOperation(ctx, "CheckInLicense", params, optFns,
c.addOperationCheckInLicenseMiddlewares)
 if err != nil {
  return nil, err
 }

 out := result.(*CheckInLicenseOutput)
 out.ResultMetadata = metadata
 return out, nil
}

type CheckInLicenseInput struct {

 // License consumption token.
 //
 // This member is required.
 LicenseConsumptionToken *string

 // License beneficiary.
 Beneficiary *string

 noSmithyDocumentSerde
}

type
 CheckInLicenseOutput struct {
 // Metadata pertaining to the operation's result.
 ResultMetadata middleware.Metadata

 noSmithyDocumentSerde
}

func (c *Client) addOperationCheckInLicenseMiddlewares(stack *middleware.Stack, options Options) (err error) {
 if err := stack.Serialize.Add(&setOperationInputMiddleware{}, middleware.After); err != nil {
  return err
 }
 err = stack.Serialize.Add(&awsAwsjson11_serializeOpCheckInLicense{}, middleware.After)
 if err != nil {
  return err
```

```
}
err = stack.Deserialize.Add(&awsAwsjson11_deserializeOpCheckInLicense{}, middleware.After)
if err != nil {
 return err
}
if err := addProtocolFinalizerMiddlewares(stack, options, "CheckInLicense"); err != nil {
 return fmt.Errorf("add protocol finalizers: %v", err)
}

if err = addlegacyEndpointContextSetter(stack, options); err != nil {
 return err
}
if err = addSetLoggerMiddleware(stack, options); err != nil {
 return err
}
if err = addClientRequestID(stack); err != nil {
 return err
}
if
err = addComputeContentLength(stack); err != nil {
 return err
}
if err = addResolveEndpointMiddleware(stack, options); err != nil {
 return err
}
if err = addComputePayloadSHA256(stack); err != nil {
 return err
}
if err = addRetry(stack, options); err != nil {
 return err
}
if err = addRawResponseToMetadata(stack); err != nil {
 return err
}
if err = addRecordResponseTiming(stack); err != nil {
 return err
}
if err = addSpanRetryLoop(stack, options); err != nil {
 return err
}
if err = addClientUserAgent(stack, options); err != nil {
 return err
}
if err = smithyhttp.AddErrorCloseResponseBodyMiddleware(stack); err != nil {
 return err
}
if err = smithyhttp.AddCloseResponseBodyMiddleware(stack); err != nil {
 return err
```

```
 }
 if err = addSetLegacyContextSigningOptionsMiddleware(stack); err != nil {
  return err
 }
 if err = addTimeOffsetBuild(stack, c); err != nil {
  return err
 }
 if err = addUserAgentRetryMode(stack, options); err != nil {
  return err
 }
 if
 err = addCredentialSource(stack, options); err != nil {
  return err
 }
 if err = addOpCheckInLicenseValidationMiddleware(stack); err != nil {
  return err
 }
 if err = stack.Initialize.Add(newServiceMetadataMiddleware_opCheckInLicense(options.Region),
middleware.Before); err != nil {
  return err
 }
 if err = addRecursionDetection(stack); err != nil {
  return err
 }
 if err = addRequestIDRetrieverMiddleware(stack); err != nil {
  return err
 }
 if err = addResponseErrorMiddleware(stack); err != nil {
  return err
 }
 if err = addRequestResponseLogging(stack, options); err != nil {
  return err
 }
 if err = addDisableHTTPSMiddleware(stack, options); err != nil {
  return err
 }
 if err = addSpanInitializeStart(stack); err != nil {
  return err
 }
 if err = addSpanInitializeEnd(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestStart(stack); err != nil {
  return err
 }
 if err = addSpanBuildRequestEnd(stack); err != nil {
  return err
 }
```

```
 return nil
}

func newServiceMetadataMiddleware_opCheckInLicense(region
 string) *awsmiddleware.RegisterServiceMetadata {
 return &awsmiddleware.RegisterServiceMetadata{
  Region:        region,
  ServiceID:     ServiceID,
  OperationName: "CheckInLicense",
 }
}
CheckoutLicense
 Initialize stack step
  spanInitializeStart
  RegisterServiceMetadata
  legacyEndpointContextSetter
  SetLogger
  OperationInputValidation
  spanInitializeEnd
 Serialize stack step
  spanBuildRequestStart
  setOperationInput
  ResolveEndpoint
  OperationSerializer
 Build stack step
  ClientRequestID
  ComputeContentLength
  SetCredentialSourceMiddleware
  UserAgent
  AddTimeOffsetMiddleware
  RecursionDetection
  spanBuildRequestEnd
 Finalize stack step
  spanRetryLoop
  Retry
  RetryMetricsHeader
  ResolveAuthScheme
  GetIdentity
  ResolveEndpointV2
  disableHTTPS
  ComputePayloadHash
  setLegacyContextSigningOptions
  Signing
 Deserialize stack step
  AddRawResponseToMetadata
  ErrorCloseResponseBody
  CloseResponseBody
  ResponseErrorWrapper
```

```
 RequestIDRetriever
 OperationDeserializer
 AddTimeOffsetMiddleware
 RecordResponseTiming
 RequestResponseLogger
```

1.134 stdlib go1.24.3

1.134.1 Available under license :

```
// Copyright 2024 The Go Authors. All rights reserved.
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package copyright

import (
 "bytes"
 "internal/testenv"
 "io"
 "io/fs"
 "os"
 "path/filepath"
 "testing"
)

var copyright = []byte("Copyright")

var permitted = [][]byte{
 []byte("// Code generated by "),
 []byte("// Code generated from "),
 []byte("// Created by cgo -cdefs"),
 []byte("// DO NOT EDIT\n// generated by:"),
 []byte("// Empty assembly file"),
 []byte("// Generated using cgo"),
 []byte("// Original source:\n//\thttp://www.zorinaq.com/papers/md5-amd64.html"), // public domain crypto/md5
 []byte("// created by cgo -cdefs"),
 []byte("// go run mkasm.go"),
 []byte("// mkerrors"),
 []byte("// mksys"),
 []byte("// run\n// Code generated by"), // cmd/compile/internal/test/constFold_test.go
}

func TestCopyright(t *testing.T) {
 buf := make([]byte, 2048)
 filepath.WalkDir(filepath.Join(testenv.GOROOT(t), "src"), func(path string,
 d fs.DirEntry, err error) error {
  if d.IsDir() && (d.Name() == "testdata" || d.Name() == "vendor") {
```

```
  return filepath.SkipDir
 }
 switch filepath.Ext(d.Name()) {
 default:
  return nil
 case ".s", ".go":
  // check
 }

 f, err := os.Open(path)
 if err != nil {
  t.Error(err)
  return nil
 }
 defer f.Close()
 n, err := f.Read(buf)
 if err != nil && err != io.EOF {
  t.Error(err)
  return nil
 }
 b := buf[:n]
 if bytes.Contains(b, copyright) {
  return nil
 }
 for _, ok := range permitted {
  if bytes.HasPrefix(b, ok) {
   return nil
  }
 }
 t.Errorf("%s: missing copyright notice", path)
 return nil
 })
}
```

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1.135 consul-api 1.32.1

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---
layout: api
page_title: License - Operator - HTTP API

description: |-
The /operator/license endpoint allows for retrieving the Consul
Enterprise License.

License - Operator HTTP API

<EnterpriseAlert />

The licensing functionality described here is available only in
[Consul Enterprise](https://www.hashicorp.com/products/consul/) version 1.1.0 and later.

Getting the Consul License

This endpoint gets information about the current license.

Method	Path	Produces
`GET`	`/operator/license`	`application/json`

The table below shows this endpoint's support for
[blocking queries](/consul/api-docs/features/blocking),
[consistency modes](/consul/api-docs/features/consistency),
[agent caching](/consul/api-docs/features/caching), and
[required ACLs](/consul/api-docs/api-structure#authentication).

| Blocking Queries | Consistency Modes | Agent Caching | ACL Required |
| ----------------
| ------------------ | ------------- | ------------ |
| `NO` | `all` | `none` | `none` |

The corresponding CLI command is [`consul license get`](/consul/commands/license#get).

Query Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be retrieved.
This will default to the datacenter of the agent serving the HTTP request.

Sample Request

```shell-session
$ curl \
  http://127.0.0.1:8500/v1/operator/license
```

Sample Response

```json
```

```
{
 "Valid": true,
 "License": {
  "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
  "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
  "installation_id": "*",
  "issue_time": "2018-05-21T20:03:35.911567355Z",
  "start_time": "2018-05-21T04:00:00Z",
  "expiration_time": "2019-05-22T03:59:59.999Z",
  "product": "consul",
  "flags": {
   "package": "premium"
  },
  "features": [
   "Automated Backups",
   "Automated Upgrades",

   "Enhanced Read Scalability",
   "Network Segments",
   "Redundancy Zone",
   "Advanced Network Federation"
  ],
  "temporary": false
 },
 "Warnings": []
}
```

Updating the Consul License

-> **Deprecated** This endpoint was removed in Consul v1.10.0 along with the ability to manage the cluster's license via the API.

This endpoint updates the Consul license and returns some of the license contents as well as any warning messages regarding its validity.

Method	Path	Produces
`PUT`	`/operator/license`	`application/json`

The table below shows this endpoint's support for [blocking queries](/consul/api-docs/features/blocking), [consistency modes](/consul/api-docs/features/consistency), [agent caching](/consul/api-docs/features/caching), and [required ACLs](/consul/api-docs/api-structure#authentication).

| Blocking Queries | Consistency Modes | Agent Caching | ACL Required

|
| ---------- | ---------- | ---------- | ---------- |
| `NO` | `none` | `none` | `operator:write` |

The corresponding CLI command is [`consul license put`](/consul/commands/license#put).

Query Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be updated.
 This will default to the datacenter of the agent serving the HTTP request.

Sample Payload

The payload is the raw license blob.

Sample Request

```shell-session
$ curl \
  --request PUT \
  --data @consul.license \
  http://127.0.0.1:8500/v1/operator/license
```

Sample Response

```json
{
 "Valid": true,
 "License": {
  "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
  "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
  "installation_id": "*",
  "issue_time": "2018-05-21T20:03:35.911567355Z",
  "start_time": "2018-05-21T04:00:00Z",
  "expiration_time": "2019-05-22T03:59:59.999Z",
  "product":
 "consul",
  "flags": {
   "package": "premium"
  },
  "features": [
   "Automated Backups",
   "Automated Upgrades",
   "Enhanced Read Scalability",
   "Network Segments",
   "Redundancy Zone",
   "Advanced Network Federation"
```

```
  ],
  "temporary": false
 },
 "Warnings": []
}
```

Resetting the Consul License

-> **Deprecated** This endpoint was removed in Consul v1.10.0 along with
the ability to manage the cluster's license via the API.

This endpoint resets the Consul license to the license included in the Enterprise binary. If the included license is not valid, the replace will fail.

Method	Path	Produces
`DELETE`	`/operator/license`	`application/json`

The table below shows this endpoint's support for
[blocking queries](/consul/api-docs/features/blocking),
[consistency modes](/consul/api-docs/features/consistency),
[agent caching](/consul/api-docs/features/caching),
 and
[required ACLs](/consul/api-docs/api-structure#authentication).

Blocking Queries	Consistency Modes	Agent Caching	ACL Required
`NO`	`none`	`none`	`operator:write`

The corresponding CLI command is [`consul license reset`](/consul/commands/license#reset).

Query Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be updated.
 This will default to the datacenter of the agent serving the HTTP request.

Sample Request

```shell-session
$ curl \
  --request DELETE \
  http://127.0.0.1:8500/v1/operator/license
```

Sample Response

```json
```

```
{
 "Valid": true,
 "License": {
  "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
  "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
  "installation_id": "*",
  "issue_time": "2018-05-21T20:03:35.911567355Z",
  "start_time": "2018-05-21T04:00:00Z",
   "expiration_time": "2019-05-22T03:59:59.999Z",
  "product": "consul",
  "flags": {
   "package": "premium"
  },
  "features": [
   "Automated Backups",
   "Automated Upgrades",
   "Enhanced Read Scalability",
   "Network Segments",
   "Redundancy Zone",
   "Advanced Network Federation"
  ],
  "temporary": false
 },
 "Warnings": []
}
```
```
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

@import './skin';
@import './layout';
/**
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* SPDX-License-Identifier: BUSL-1.1
*/

.consul-intention-permission-form {
 h2 {
  padding-top: 1.4em;
  margin-top: 0.2em;
  margin-bottom: 0.6em;
 }
 .consul-intention-permission-header-form {
  margin-top: 10px;
 }
 fieldset:nth-child(2) > div,
```

```
 .consul-intention-permission-header-form fieldset > div {
   display: grid;
   grid-template-columns: repeat(auto-fit, minmax(160px, 1fr));
   grid-gap: 12px;
 }
 fieldset:nth-child(2) > div label:last-child {
   grid-column: span 2;
 }
 .ember-basic-dropdown-trigger {
   padding: 5px;
 }
 .checkbox-group {
   flex-direction: column;
 }
}
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

@import './skin';
@import './layout';
.consul-intention-permission-list > ul > li {
 @extend %list-row-200;
}
.consul-intention-permission-list:not(.readonly) > ul > li {
 @extend %with-composite-row-intent;
}
.consul-intention-permission-list strong {
 @extend %pill-500;
}
.consul-intention-permission-list .intent-allow {
 @extend %pill-allow;
}
.consul-intention-permission-list .intent-deny {
 @extend %pill-deny;
}
```

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---
layout: docs
page_title: Enterprise License FAQ
description: >-
Review frequently asked questions (FAQs) about Consul Enterprise licenses to learn more about how licenses work, what happens when they expire, and how to get a trial license.

Frequently Asked Questions (FAQ)

This FAQ is for the license changes introduced in Consul Enterprise version 1.10.0.
Consul Enterprise automatically loads Consul licenses when the server agent starts.

Q: Can I get a quick summary of the Consul changes?

Starting with Consul Enterprise 1.10.0, the license enablement process is different.

HashiCorp Enterprise servers will no longer start without a license. Servers require licenses to be provided from either an environment variable or file.
If the license is missing, invalid, or expired, the server will immediately exit.
This check is part of the server boot-up process.

In previous versions of HashiCorp enterprise products, one server could distribute a license to other servers via the Raft protocol.
This will no longer work since each server must be able to find a valid license during the startup process.

Q: What are the upgrade requirements?

All customers on Consul Enterprise 1.8/1.9 must first upgrade their client and server agents to the latest patch release.
During the upgrade the license file must also be configured on client agents in an environment variable or file path, otherwise the Consul agents will fail to retrieve the license with a valid agent token.
The upgrade process varies if ACLs are enabled or disabled in the cluster.
Refer to the instructions on [upgrading to 1.10.x](/consul/docs/upgrading/instructions/upgrade-to-1-10-x) for details.

Q: Is there a tutorial available for the license configuration steps?

Please visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs).

Q: What resources are available?

The list below is a great starting point for learning more about the license changes introduced in Consul Enterprise 1.10.0+ent.

- [Consul Enterprise Upgrade Documentation](/consul/docs/enterprise/upgrades)

- [Consul License Documentation](/consul/docs/enterprise/license/overview)

- [License configuration values documentation](/consul/docs/enterprise/license/overview#binaries-without-built-in-licenses)

- [Install a HashiCorp Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs)

Q: Do these changes impact all customers/licenses?

The license changes introduced in 1.10.0 only affect Consul Enterprise.
This impacts customers that have an enterprise binary (trial or non-trial licenses) downloaded from https://releases.hashicorp.com.
The license changes do not impact customers with the baked-in licensed binaries. In a later release of Consul Enterprise, baked-in binaries will be deprecated.

Q: What is the product behavior change introduced by the licensing changes?

Starting with Consul Enterprise 1.10.0,
a valid license is required on-disk (auto-loading) or as an environment variable for Consul Enterprise to successfully boot-up.
The in-storage license feature will not be supported starting with Consul Enterprise 1.10.0+ent. All Consul Enterprise clusters using 1.10.0+ent must ensure that there is a valid license on-disk (auto-loaded) or as an environment variable.

Q: What is the impact on trial licenses due to this change? ((#q-what-is-the-impact-on-evaluation-licenses-due-to-this-change))

Consul Enterprise 1.10.0+ server agents require a valid license to start.
The license can be provided on disk (auto-loaded) or as an environment variable.
There is no longer a 6-hour trial period in which Consul Enterprise server agents
can operate without a license.

Q: Is there a grace period when licenses expire?

YesConsul will continue normal operation and can be restarted after license *expiration* as defined in [`expiration_time`](/consul/api-docs/operator/license#getting-the-consul-license).
As
license expiration is approached or passed, Consul will issue warnings in the system logs.

Consul will only cease operation after license *termination*, which occurs 10 years
after license expiration and is defined in
[`termination_time`](/consul/api-docs/operator/license#getting-the-consul-license).

~> **Starting with Consul 1.14, and patch releases 1.13.3 and 1.12.6, Consul will support non-terminating licenses**:
Please contact your support representative for more details on non-terminating licenses.
An expired license will not allow Consul versions released after the expiration date to run.
It will not be possible to upgrade to a new version of Consul released after license expiration.

Q: Does this affect client agents?

There are upgrade requirements that affect Consul Enterprise clients.
Please review the [upgrade requirements](#q-what-are-the-upgrade-requirements) documentation.

Q: Does this affect snapshot agents?

Same behavior as Consul clients.
See answer for [Does this affect client agents?](#q-does-this-affect-client-agents)

Q: What is the behavior if the license is missing?

Consul server agents will detect the absence of the license and immediately exit.

Consul client agents will attempt to retrieve the license from servers if certain conditions are met:

- ACLs are enabled.
- An ACL token is provided to the client agent.
- The client agents configuration contains `retry_join` addresses.
- The retry join addresses are addresses of the Consul servers.

Consul snapshot agents will attempt to retrieve the license from servers if certain conditions are met: ACLs are enabled, a ACL token is provided to the client agent, the client agents configuration contains `retry_join` addresses, the retry join addresses are addresses of the Consul servers.

Q: Where can users get a trial license for Consul Enterprise?

Contact your [HashiCorp Support contact](https://support.hashicorp.com/) for a development license.

~> **Trial
install will cease operation 24 hours after 30-day license expiration**:
Trial licenses are not meant to be used in production.
This is unlike non-trial licenses which provide a 10 year grace period as described in
the answer for [Q: Is there a grace period when licenses expire?](#q-is-there-a-grace-period-when-licenses-expire).

Q: How can I renew a license?

Contact your organization's [HashiCorp account team](https://support.hashicorp.com/hc/en-us) for information on how to renew your organization's enterprise license.

Q: I'm an existing enterprise customer but don't have my license, how can I get it?

Contact your organization's [HashiCorp account team](https://support.hashicorp.com/hc/en-us) for information on how to renew your organization's enterprise license.

Q: Are the license files locked to a specific cluster?

The license files are not locked to a specific cluster or cluster node. The above changes apply to all nodes in a cluster.

Q: Will this
impact HCP Consul Dedicated?

This will not impact HCP Consul Dedicated.

Q: Does this need to happen every time a node restarts, or is this a one-time check?

Consul Enterprise binaries starting with 1.10.0+ent, will be subject to EULA check. Release 1.10.0+ent introduces the EULA check for trial licenses (non-trial licenses already go through EULA check during contractual agreement).

The agreement to a EULA happens only once (when the user gets their license), Consul Enterprise **will check for the presence of a valid license every time a node restarts**.

When a customer upgrades existing clusters to a 1.10.0+ent release, they need to have a valid license to successfully upgrade. This valid license must be auto-loaded.

When a customer deploys new clusters to a 1.10.0+ent release, they need to have a valid license to successfully upgrade. This valid license must be on-disk (auto-loaded).

Q: What are the scenarios that a customer must plan for because of these changes?

New
Consul cluster deployments using 1.10.0+ent will need to have a valid license on servers to successfully deploy. This valid license must be on-disk (auto-loaded) or as an environment variable.
Please see the [upgrade requirements](/consul/docs/enterprise/license/faq#q-what-are-the-upgrade-requirements).

Q: What is the migration path for customers who want to migrate from their existing license-as-applied-via-the-CLI flow to the license on disk flow?

VM

1. Run [`consul license get -signed`](/consul/commands/license#get) to extract the license from their running cluster. Store the license in a secure location on disk.
1. Set up the necessary configuration so that when Consul Enterprise reboots it will have access to the required license. This could be via the client agent configuration file or an environment variable.
1. Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license
key.
1. Follow the Consul upgrade [documentation](/consul/docs/upgrading).

Kubernetes

NOTE: If you are not upgrading Consul or your Helm chart version then no action is required.

1. In order to use Consul Enterprise 1.10.0 or greater on Kubernetes you must use version 0.32.0 or greater of the Helm chart.
1. You should already have a Consul Enterprise license set as a Kubernetes secret. If you do not, refer to [how to obtain a copy of your license](/consul/docs/enterprise/license/faq#q-i-m-an-existing-enterprise-customer-but-don-t-have-my-license-how-can-i-get-it).
Once you have the license then create a Kubernetes secret containing the license as described in [Kubernetes - Consul Enterprise](/consul/docs/k8s/deployment-configurations/consul-enterprise).
1. Follow the [Kubernetes Upgrade Docs](/consul/docs/k8s/upgrade) to upgrade. No changes to your `values.yaml` file are needed to enable enterprise autoloading since this support is built in to consul-helm 0.32.0 and greater.

!>
Warning: If you are upgrading the Helm chart but **not** upgrading the Consul version, you must set `server.enterpriseLicense.enableLicenseAutoload: false`. See [Kubernetes - Consul Enterprise](/consul/docs/k8s/deployment-configurations/consul-enterprise) for more details.

Q: What is the migration path for customers who want to migrate from their existing perpetually-licensed

binaries to the license on disk flow?

VM

1. Acquire a valid Consul Enterprise license. If you are an existing HashiCorp enterprise customer you may contact your organization's [customer success manager](https://support.hashicorp.com/hc/en-us) (CSM) for information on how to get your organization's enterprise license.
1. Store the license in a secure location on disk.
1. Set up the necessary configuration so that when Consul Enterprise reboots it will have the required license. This could be via the client agent configuration file or an environment variable.
  Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.
1. Follow the Consul upgrade [documentation](/consul/docs/upgrading).

Kubernetes

1. Acquire a valid Consul Enterprise license. If you are an existing HashiCorp enterprise customer you may contact your organization's [customer success manager](https://support.hashicorp.com/hc/en-us) (CSM) for information on how to get your organization's enterprise license.
1. Set up the necessary configuration so that when Consul Enterprise reboots it will have the required license. This could be via the client agent configuration file or an environment variable.
  Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.
1. Proceed with the `helm` [upgrade instructions](/consul/docs/k8s/upgrade)

Q: Will Consul downgrades/rollbacks work?

When downgrading
 to a version of Consul before 1.10.0+ent, customers will need to follow the previous process for applying an enterprise licenses to Consul Enterprise.

Q: Are there potential pitfalls when downgrading or upgrading Consul server instances?

~> Verify that you meet the [upgrade requirements](/consul/docs/enterprise/license/faq#q-what-are-the-upgrade-requirements).

Assume a scenario where there are three Consul server nodes:

- Node A: v1.9.5
- Node B: v1.10.0 [Leader]
- Node C: v1.9.5

The command `consul license put` is issued from Node A. This will result in an error due to how Consul routes calls to the server node, Node B in this example.
Because Node A is a follower when the call `consul license put` is issued, the call will be redirected to Node B (leader).
The `consul license put` operation will fail due to being removed from 1.10.0.
This is a scenario that could occur if a customer downgrades from 1.10.0+ and the Consul leadership has not

transferred back over to a node
 not running 1.10.0+.
This also has the potential of occurring when upgrading if scheduled license updates or autoscaling groups recoveries are in place.

Q: Any impacts to Consul Kubernetes?

If you are using a Consul Enterprise version prior to 1.10.0 and decide to upgrade the Helm chart to version 0.32.0 or newer, but not the Consul version.
You will need to add the following configuration.

```
server:
 enterpriseLicense:
   enableLicenseAutoload: false
```
```
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

.consul-intention-permission-header-list {
 max-height: 200px;
 overflow: auto;
}
{{!
 Copyright (c) HashiCorp, Inc.
 SPDX-License-Identifier: BUSL-1.1
}}

{{#if (gt items.length 0)}}
<ListCollection
 class="consul-intention-permission-header-list"
 @items={{items}}
 @scroll="native"
 @cellHeight={{42}}
as |item|>
 <BlockSlot @name="details">
   <dl>
     <dt>
       <Tooltip>
         Header
       </Tooltip>
     </dt>
     <dd>
       {{item.Name}} {{route-match item}}
     </dd>
   </dl>
```

```
</BlockSlot>
<BlockSlot @name="actions" as |Actions|>
  <Actions as |Action|>
    <Action data-test-delete-action @onclick={{action ondelete item}} class="dangerous">
      <BlockSlot @name="label">
        Delete
      </BlockSlot>
      <BlockSlot @name="confirmation" as |Confirmation|>
        <Confirmation class="warning">
          <BlockSlot @name="header">
            Confirm delete
          </BlockSlot>
          <BlockSlot @name="body">
            <p>
              Are you sure you want to delete this header?

  </p>
          </BlockSlot>
          <BlockSlot @name="confirm" as |Confirm|>
            <Confirm>Delete</Confirm>
          </BlockSlot>
        </Confirmation>
      </BlockSlot>
    </Action>
  </Actions>
 </BlockSlot>
</ListCollection>
{{/if}}
{
 "name": "envoy.filters.http.rbac",
 "typedConfig": {
  "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
  "rules": {
    "policies": {
      "consul-intentions-layer7-0": {
        "permissions": [
          {
            "andRules": {
              "rules": [
                {
                  "urlPath": {
                    "path": {
                      "exact": "/v1/secret"
                    }
                  }
                },
                {
                  "andRules": {
```

```
        "rules": [
          {
            "metadata": {
              "filter": "envoy.filters.http.jwt_authn",
              "path": [
                {
                  "key": "jwt_payload_auth0"
                },
                {
                  "key": "iss"
                }
               ],
              "value": {
                "stringMatch": {
                  "exact": "mytest.auth0-issuer"
                }
              }
            }
          },
          {
            "metadata": {
              "filter": "envoy.filters.http.jwt_authn",
              "path": [
                {
                  "key": "jwt_payload_auth0"
                },
                {
                  "key": "perms"
                },
                {
                  "key": "role"
                }
              ],
              "value": {
                "stringMatch": {
                  "exact": "admin"

  }
                }
              }
            }
          }
        ]
      }
    }
   ]
  }
},
{
```

```
    "andRules": {
     "rules": [
      {
       "urlPath": {
        "path": {
         "exact": "/v1/admin"
        }
       }
      },
      {
       "notRule": {
        "urlPath": {
         "path": {
          "exact": "/v1/secret"
         }
        }
       }
      }
     ]
    }
   }
  ],
  "principals": [
   {
    "andIds": {
     "ids": [
      {
       "authenticated": {
        "principalName": {

         "safeRegex": {
             "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
           }
         }
        }
       }
      },
      {
       "andIds": {
        "ids": [
         {
          "metadata": {
           "filter": "envoy.filters.http.jwt_authn",
           "path": [
            {
             "key": "jwt_payload_okta"
            },
            {
             "key": "iss"
```

```
                    }
                   ],
                   "value": {
                    "stringMatch": {
                     "exact": "mytest.okta-issuer"
                    }
                   }
                  }
                 },

                 {
                  "metadata": {
                   "filter": "envoy.filters.http.jwt_authn",
                   "path": [
                    {
                     "key": "jwt_payload_okta"
                    },
                    {
                     "key": "roles"
                    }
                   ],
                   "value": {
                    "stringMatch": {
                     "exact": "testing"
                    }
                   }
                  }
                 }
                ]
               }
              }
             ]
            }
           }
          ]
         }
        }
       }
      }
     }
    }
   }
  }
 }
}
{{!
 Copyright (c) HashiCorp, Inc.
 SPDX-License-Identifier: BUSL-1.1
}}

<div
 ...attributes
 class="consul-intention-permission-header-form"
```

```
>
 <FormGroup
  @name={{name}}
 as |group|>

  {{yield (hash
    submit=(action 'submit' changeset)
    reset=(action 'reset' changeset)

    isDirty=(and changeset.isValid changeset.isDirty)
    changeset=changeset
  )}}

  <fieldset>
    <div>
      <group.Element
        @name="HeaderType"
        @type="select"
      as |el|>
        <el.Label>Header type</el.Label>
        <PowerSelect
          @options={{headerTypes}}
          @selected={{headerType}}
          @onChange={{action 'change' 'HeaderType' changeset}} as |Type|>
            {{get headerLabels Type}}
        </PowerSelect>
      </group.Element>


      <group.Element
        @name="Name"
        @error={{changeset-get changeset 'error.Name'}}
      as |el|>
        <el.Label>Header name</el.Label>
        <el.Text

         @value={{changeset-get changeset 'Name'}}
          oninput={{action 'change' 'Name' changeset}}
        />
        <State @state={{el.state}} @matches="error">
          <el.Error>
            {{changeset-get changeset 'error.Name.validation'}}
          </el.Error>
        </State>
      </group.Element>

{{#if shouldShowValueField}}
      <group.Element
```

```
        @name="Value"
        @error={{changeset-get changeset 'error.Value'}}
       as |el|>
        <el.Label>Header {{lowercase (get headerLabels headerType)}}</el.Label>
        <el.Text
         @value={{changeset-get changeset 'Value'}}
         oninput={{action 'change' 'Value' changeset}}
        />
        <State @state={{el.state}} @matches="error">
         <el.Error>
          {{changeset-get changeset 'error.Value.validation'}}
         </el.Error>
        </State>
       </group.Element>
{{/if}}

    </div>
  </fieldset>
 </FormGroup>
</div>
{
 "name": "envoy.filters.http.rbac",
 "typedConfig": {
  "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
  "rules": {
   "policies": {
    "consul-intentions-layer7-0": {
     "permissions": [
      {
       "andRules": {
        "rules": [
         {
          "urlPath": {
           "path": {
            "prefix": "/v1"
           }
          }
         },
         {
          "notRule": {
           "urlPath": {
            "path": {
             "exact": "/v1/secret"
            }
           }
          }
         }
        ]
```

```
    }
   },
   {
    "andRules": {
     "rules": [
      {
       "andRules": {
        "rules": [
         {

       "urlPath": {
             "path": {
              "safeRegex": {
               "regex": "/v[123]"
              }
             }
            }
           },
           {
            "header": {
             "name": ":method",
             "stringMatch": {
              "safeRegex": {
               "regex": "GET|HEAD|OPTIONS"
              }
             }
            }
           }
          ]
         }
        },
        {
         "notRule": {
          "urlPath": {
           "path": {
            "exact": "/v1/secret"
           }
          }
         }
        },

{
         "notRule": {
          "andRules": {
           "rules": [
            {
             "urlPath": {
              "path": {
```

```
                    "exact": "/v1/admin"
                   }
                  }
                 },
                 {
                  "header": {
                   "name": ":method",
                   "stringMatch": {
                    "safeRegex": {
                     "regex": "GET"
                    }
                   }
                  }
                 }
                ]
               }
              }
             ]
            }
           },
           {
            "andRules": {
             "rules": [
              {

"andRules": {
                "rules": [
                 {
                  "header": {
                   "name": "x-foo",
                   "presentMatch": true
                  }
                 },
                 {
                  "header": {
                   "name": "x-bar",
                   "stringMatch": {
                    "exact": "xyz"
                   }
                  }
                 },
                 {
                  "header": {
                   "name": "x-dib",
                   "stringMatch": {
                    "prefix": "gaz"
                   }
```

```
          }
         },
         {
          "header": {
           "name": "x-gir",
           "stringMatch": {

"suffix": "zim"
           }
          }
         },
         {
          "header": {
           "name": "x-zim",
           "stringMatch": {
            "safeRegex": {
             "regex": "gi[rR]"
            }
           }
          }
         },
         {
          "header": {
           "invertMatch": true,
           "name": "z-foo",
           "presentMatch": true
          }
         },
         {
          "header": {
           "invertMatch": true,
           "name": "z-bar",
           "stringMatch": {
            "exact": "xyz"

    }
          }
         },
         {
          "header": {
           "invertMatch": true,
           "name": "z-dib",
           "stringMatch": {
            "prefix": "gaz"
           }
          }
         },
         {
```

```
            "header": {
              "invertMatch": true,
              "name": "z-gir",
              "stringMatch": {
                "suffix": "zim"
              }
            }
          },
          {
            "header": {
              "invertMatch": true,
              "name": "z-zim",
              "stringMatch": {
                "safeRegex": {

              "regex": "gi[rR]"
                }
              }
            }
          }
        ]
      }
    },
    {
      "notRule": {
        "urlPath": {
          "path": {
            "exact": "/v1/secret"
          }
        }
      }
    },
    {
      "notRule": {
        "header": {
          "name": "x-baz",
          "presentMatch": true
        }
      }
    }
  ]
 }
],
"principals": [
 {
  "authenticated": {
   "principalName": {
```

```
              "safeRegex": {
                "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
              }
            }
          }
        }
      ]
    }
  }
 }
}
{
 "name": "envoy.filters.network.rbac",
 "typedConfig": {
  "@type": "type.googleapis.com/envoy.extensions.filters.network.rbac.v3.RBAC",
  "rules": {},
  "statPrefix": "connect_authz"
 }
}
{
 "Valid": true,
 "License": {
  "license_id": "${fake.random.uuid()}",
  "customer_id": "${fake.random.uuid()}",
  "installation_id": "*",
  "issue_time": "2021-01-13T15:25:19.052900132Z",
  "start_time": "2021-01-13T00:00:00Z",
  "expiration_time": "${env('CONSUL_LICENSE_EXPIRATION', '2022-05-02T23:59:59.999Z')}",
  "termination_time": "${env('CONSUL_LICENSE_TERMINATION', '2022-01-13T23:59:59.999Z')}",
  "product": "consul",
  "flags": {
   "modules": [
    "global-visibility-routing-scale",
    "governance-policy"
   ]
  },
  "modules": [
   "Global Visibility, Routing and Scale",
   "Governance and Policy"
  ],
  "features": [
   "Automated Backups",
   "Automated Upgrades",
   "Enhanced Read Scalability",
   "Network Segments",
   "Redundancy Zone",
   "Advanced Network Federation",
```

```
    "Namespaces",
    "SSO",
    "Audit Logging",
    "Admin Partitions"
  ]
 },
 "Warnings": [
 ]
}
{
 "name": "envoy.filters.http.jwt_authn",
 "typedConfig": {
  "@type": "type.googleapis.com/envoy.extensions.filters.http.jwt_authn.v3.JwtAuthentication",
  "providers": {
   "okta": {
    "issuer": "test-issuer",
    "payloadInMetadata": "jwt_payload_okta",
    "remoteJwks": {
     "asyncFetch": {
      "fastListener": true
     },
     "httpUri": {
      "cluster": "jwks_cluster_okta",
      "timeout": "1s",
      "uri": "https://example-okta.com/.well-known/jwks.json"
     }
    }
   }
  },
  "rules": [
   {
    "match": {
     "prefix": "/"
    },
    "requires": {
     "requiresAny": {
      "requirements": [
       {
        "providerName": "okta"
       },
       {
        "allowMissingOrFailed": {}
       }
      ]
     }
    }
   }
  ]
```

```
 }
}
/**
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* SPDX-License-Identifier: BUSL-1.1
*/

@import './skin';
@import './layout';
.consul-intention-permission-header-list {
 > ul > li {
   @extend %list-row-200;
 }
}
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{
 "name": "envoy.filters.http.rbac",
 "typedConfig": {
   "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
   "rules": {
     "policies": {
       "consul-intentions-layer7-0": {
         "permissions": [
           {
             "andRules": {
               "rules": [
                 {
                   "andRules": {
                     "rules": [
                       {
                         "urlPath": {
                           "path": {
                             "prefix": "/v1"
                           }
                         }
                       },
                       {
                         "header": {
                           "name": "x-foo",
```

```
            "presentMatch": true
           }
          }
         ]
        }
       },
       {
        "notRule": {
         "andRules": {

         "rules": [
           {
            "urlPath": {
             "path": {
              "exact": "/v1/secret"
             }
            }
           },
           {
            "header": {
             "name": "x-baz",
             "presentMatch": true
            }
           },
           {
            "header": {
             "name": "x-bar",
             "presentMatch": true
            }
           }
          ]
         }
        }
       },
       {
        "notRule": {
         "andRules": {
          "rules": [
           {

"urlPath": {
             "path": {
              "exact": "/v1/admin"
             }
            }
           },
           {
            "header": {
```

```
                    "name": "x-baz",
                    "presentMatch": true
                  }
                },
                {
                  "header": {
                    "name": "x-bar",
                    "presentMatch": true
                  }
                }
              ]
            }
          }
        }
      ]
    }
  ],
  "principals": [
    {
      "authenticated": {
        "principalName": {
          "safeRegex": {
            "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
          }
        }
      }
    }
  ]
 }
}
```

License

```
<figure>
 <figcaption>URI: <code>/:partition/:nspace/:dc/license</code></figcaption>
 <DataSource
  @src={{
    uri '/${partition}/${nspace}/${dc}/license'
    (hash
      partition='partition'
      nspace='ns'
      dc='dc-1'
    )
  }}
```

```
  @onchange={{action (mut data) value="data"}}
/>
<pre><code>{{json-stringify data null 4}}</code></pre>
</figure>
```
---
page_title: Automated license utilization reporting
description: >-
  Learn what data HashiCorp collects to meter Enterprise license utilization. Enable or disable reporting. Review sample payloads and logs.

Automated license utilization reporting

This topic describes how to enable automated license utilization reporting in Consul Enterprise. This feature automatically sends license utilization data to HashiCorp so that you do not have to manually collect and report it. It also enables you to review your license usage with the monitoring solution you already use, such as Splunk and Datadog, as you optimize and manage your deployments.

Introduction

You can use automated license utilization report to understand how much additional networking infrastructure you can deploy under your current contract. This feature helps you protect against overutilization and budget for predicted consumption.

Automated reporting shares the minimum data required to validate license utilization
 as defined in our contracts. This data mostly consists of computed metrics, and it will never contain Personal Identifiable Information (PII) or other sensitive information. Automated reporting shares the data with HashiCorp using a secure unidirectional HTTPS API and makes an auditable record in the product logs each time it submits a report. This process is GDPR-compliant.

Requirements

Automated license utilization reporting does not support _air-gapped installations_, which are systems with no network interfaces.

The following versions of Consul Enterprise support automated license utilization reporting:

- Consul Enterprise v1.16.0 and newer.
- Patch releases of Consul Enterprise v1.15.4 and newer.
- Patch releases of Consul Enterprise v1.14.8 and newer.
- Patch releases of Consul Enterprise v1.13.9 and newer.

Download a supported release from the [Consul Versions](https://releases.hashicorp.com/consul/) page.

Enable automated reporting

Before you enable automated reporting,

make sure that outbound network traffic is configured correctly and upgrade your enterprise product to a version that supports it. If your installation is air-gapped or network settings are not in place, automated reporting will not work.

To enable automated reporting, complete the following steps:

1. [Allow outbound HTTPS traffic on port 443](#allow-outbound-https-traffic)
1. [Check product logs](#check-product-logs)

Allow outbound HTTPS traffic on port 443

Make sure that your network allows HTTPS egress on port 443 from `https://reporting.hashicorp.services` by adding the following IP addresses to your allow-list:

- `100.20.70.12`
- `35.166.5.222`
- `23.95.85.111`
- `44.215.244.1`

Check product logs

Automatic license utilization reporting starts sending data within roughly 24 hours. Check the product logs for records that the data sent successfully.

<CodeBlockConfig hideClipboard>

```
[DEBUG] beginning snapshot export
[DEBUG] creating payload
[DEBUG] marshalling
 payload to json
[DEBUG] generating authentication headers
[DEBUG] creating request
[DEBUG] sending request
[DEBUG] performing request: method=POST url=https://census.license.hashicorp.services
[DEBUG] recording audit record
[INFO]  reporting: Report sent: auditRecord={"payload":{"payload_version":"1","license_id":"d2cdd857-4202-5a45-70a6-e4b531050c34","product":"consul","product_version":"1.16.0-dev+ent","export_timestamp":"2023-05-26T20:09:13.753921087Z","snapshots":[{"snapshot_version":1,"snapshot_id":"0001J724F90F4XWQDSAA76ZQWA","process_id":"01H1CTJPC1S8H7Q45MKTJ689ZW","timestamp":"2023-05-26T20:09:13.753513962Z","schema_version":"1.0.0","service":"consul","metrics":{"consul.billable.nodes":{"key":"consul.billable.nodes","kind":"counter","mode":"write","value":2},"consul.billable.service_instances":{"key":"consul.billable.service_instances","kind":"counter","mode":"write","value":2}}}],"metadata":{}}}
[DEBUG] completed recording audit record
[DEBUG] export finished successfully"
```

</CodeBlockConfig>

If
 your installation is air-gapped or your network does not allow the correct egress, the logs show an error.

<CodeBlockConfig hideClipboard>

```
[DEBUG] reporting: beginning snapshot export
[DEBUG] reporting: creating payload
[DEBUG] reporting: marshalling payload to json
[DEBUG] reporting: generating authentication headers
[DEBUG] reporting: creating request
[DEBUG] reporting: sending request
[DEBUG] reporting: performing request: method=POST url=https://census.license.hashicorp.services
[DEBUG] reporting: error status code received: statusCode=403
```

</CodeBlockConfig>

In this case, reconfigure your network to allow egress and check the logs again in roughly 24 hours to confirm that automated reporting works correctly.

Opt out

If your installation is air-gapped or you want to manually collect and report on the same license utilization metrics, you can opt out of automated reporting.

Manually reporting these metrics can be time consuming. Opting
 out of automated reporting does not mean that you also opt out from sending license utilization metrics. Customers who opt out of automated reporting are still required to manually collect and send license utilization metrics to HashiCorp.

If you are considering opting out because you are worried about the data, we strongly recommend that you review the [example payloads](#example-payloads) before opting out. If you have concerns with any of the automatically reported data, raise these concerns with your account manager.

There are two methods for opting out of automated reporting:

- HCL configuration (recommended)
- Environment variable (requires restart)

We recommend opting out in your product's configuration file because it does not require a system restart. Add the following block to your `configuration.hcl` or `configuration.json` file.

```hcl
reporting {
 license {
  enabled = false
```

```
 }
}
```

When opting out using an environment variable, the system provides a startup message
 confirming that you have disabled automated reporting. Set the following environment variable to disable automated reporting:

<CodeBlockConfig>

```shell-session
$ export OPTOUT_LICENSE_REPORTING=true
```

</CodeBlockConfig>

After you set the environment variable, restart your system to complete the process for opting out.

```shell-session
$ consul reload
```

Check your product logs roughly 24 hours after opting out to make sure that the system is not trying to send reports. Keep in mind that if your configuration file and environment variable differ, the environment variable setting takes precedence.

Example payloads

HashiCorp collects the following utilization data as JSON payloads:
`exporter_version` - The version of the licensing exporter

<CodeBlockConfig hideClipboard>

```json
{
 "payload": {
   "payload_version": "1",
   "license_id": "d2cdd857-4202-5a45-70a6-e4b531050c34",
   "product": "consul",
   "product_version": "1.16.0-dev+ent",
   "export_timestamp":
 "2023-05-26T20:09:13.753921087Z",
   "snapshots": [
     {
       "snapshot_version": 1,
       "snapshot_id": "0001J724F90F4XWQDSAA76ZQWA",
       "process_id": "01H1CTJPC1S8H7Q45MKTJ689ZW",
```

```
      "timestamp": "2023-05-26T20:09:13.753513962Z",
      "schema_version": "1.0.0",
      "service": "consul",
      "metrics": {
        "consul.billable.nodes": {
          "key": "consul.billable.nodes",
          "kind": "counter",
          "mode": "write",
          "value": 2
        },
        "consul.billable.service_instances": {
          "key": "consul.billable.service_instances",
          "kind": "counter",
          "mode": "write",
          "value": 2
        }
      }
    }
  ],
  "metadata": {}
 }
}
```

</CodeBlockConfig>
---
layout: docs
page_title: Storing the Enterprise License in Vault
description: >-
 Configuring the Consul Helm chart to use an enterprise license stored in Vault.

Storing the Enterprise License in Vault

This topic describes how to configure the Consul Helm chart to use an enterprise license stored in Vault.
Overview
Complete the steps outlined in the [Data Integration](/consul/docs/k8s/deployment-configurations/vault/data-integration) section to use an enterprise license stored in Vault.

Complete the following steps once:
 1. Store the secret in Vault.
 1. Create a Vault policy that authorizes the desired level of access to the secret.

Repeat the following steps for each datacenter in the cluster:
 1. Create Vault Kubernetes auth roles that link the policy to each Consul on Kubernetes service account that requires access.
 1. Update the Consul on Kubernetes helm chart.

Prerequisites
Prior to setting up the data integration between Vault and Consul on Kubernetes,
you will need to have:
1. Read and completed the steps in the [Systems Integration](/consul/docs/k8s/deployment-configurations/vault/systems-integration) section of [Vault as a Secrets Backend](/consul/docs/k8s/deployment-configurations/vault).
2. Read the [Data Integration Overview](/consul/docs/k8s/deployment-configurations/vault/data-integration) section of [Vault as a Secrets Backend](/consul/docs/k8s/deployment-configurations/vault).

Store the Secret in Vault

First, store the enterprise license in Vault:

```shell-session
$ vault kv put consul-kv/secret/enterpriselicense key="<enterprise license>"
```

Create Vault policy

Next, you will need to create a policy that allows read access to this secret.

The path to the secret referenced in the `path` resource is the same value that you will configure in the `global.enterpriseLicense.secretName` Helm configuration (refer to [Update Consul on Kubernetes Helm chart](#update-consul-on-kubernetes-helm-chart)).

<CodeBlockConfig
 filename="license-policy.hcl">

```HCL
path "consul-kv/data/secret/enterpriselicense" {
 capabilities = ["read"]
}
```

</CodeBlockConfig>

Apply the Vault policy by issuing the `vault policy write` CLI command:

```shell-session
$ vault policy write license-policy license-policy.hcl
```

Create Vault Authorization Roles for Consul

Next, you will create Kubernetes auth roles for the Consul server and client:

```shell-session
$ vault write auth/kubernetes/role/consul-server \
```

```
  bound_service_account_names=<Consul server service account> \
  bound_service_account_namespaces=<Consul installation namespace> \
  policies=license-policy \
  ttl=1h
```

```shell-session
$ vault write auth/kubernetes/role/consul-client \
  bound_service_account_names=<Consul client service account> \
  bound_service_account_namespaces=<Consul installation namespace> \
  policies=license-policy \
  ttl=1h
```

To find out the service account names of the Consul server and client,
you can
 run the following `helm template` commands with your Consul on Kubernetes values file:

- Generate Consul server service account name
 ```shell-session
 $ helm template --release-name ${RELEASE_NAME} -s templates/server-serviceaccount.yaml hashicorp/consul -f
values.yaml
 ```

- Generate Consul client service account name
 ```shell-session
 $ helm template --release-name ${RELEASE_NAME} -s templates/client-serviceaccount.yaml hashicorp/consul -f
values.yaml
 ```

Update Consul on Kubernetes Helm chart.

Now that you have configured Vault, you can configure the Consul Helm chart to
use the enterprise enterprise license in Vault:

<CodeBlockConfig filename="values.yaml">

```yaml
global:
 image: hashicorp/consul-enterprise:1.12.0-ent
 secretsBackend:
   vault:
     enabled: true
     consulServerRole: consul-server
     consulClientRole: consul-client
 enterpriseLicense:
   secretName: consul-kv/data/secret/enterpriselicense
   secretKey: key
```

```

</CodeBlockConfig>

Note
 that `global.enterpriseLicense.secretName` is the path of the secret in Vault.
This should be the same path as the one you included in your Vault policy.
`global.enterpriseLicense.secretKey` is the key inside the secret data. This should be the same
as the key you passed when creating the enterprise license secret in Vault.
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}}

<Hds::Alert @type='inline' @color={{or @type "neutral"}} class='mb-2 mt-2 consul-intention-notice-custom-resource' as |A|>
 <A.Title>Intention Custom Resource</A.Title>
 <A.Description>Some of your intentions are being managed through an Intention Custom Resource in your Kubernetes cluster. Those managed intentions will be view only in the UI. Any intentions created in the UI will work but will not be synced to the Custom Resource Definition (CRD) datastore.</A.Description>
 <A.Link::Standalone @href="{{env 'CONSUL_DOCS_URL'}}/k8s/crds"
 @text='Learn more about CRDs'
 @icon="docs-link"
 @iconPosition="trailing"
 @size="small" />
</Hds::Alert>
/**
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*/

.consul-intention-permission-form {
 h2 {
  border-top: 1px solid var(--token-color-foreground-action);
  @extend %display-400-semibold;
 }
 button.type-submit {
  @extend %frame-blue-300;
 }
 button.type-submit:hover:not(:disabled),
 button.type-submit:focus:not(:disabled) {
  @extend %frame-blue-500;
 }
 button.type-submit:disabled {
  @extend %frame-blue-200;
 }
}
```

```
.consul-intention-view {
 h2 {
   @extend %display-400-semibold;
 }
}
```

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obtain one at
http://mozilla.org/MPL/2.0/.

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---
layout: docs
page_title: Consul-Terraform-Sync Enterprise License
description: >-
 Consul-Terraform-Sync Enterprise License

Consul-Terraform-Sync Enterprise License

<EnterpriseAlert>
 Licenses are only required for Consul-Terraform-Sync (CTS) Enterprise
</EnterpriseAlert>

CTS Enterprise binaries require a [Consul Enterprise license](/consul/docs/enterprise/license/overview) to run. There is no CTS Enterprise specific license. As a result, CTS Enterprise's licensing is very similar to Consul Enterprise.

All CTS Enterprise features are available with a valid Consul Enterprise license, regardless of your Consul Enterprise packaging or pricing model.

To get a trial license for CTS, you can sign-up for the [trial license for Consul Enterprise](/consul/docs/enterprise/license/faq#q-where-can-users-get-a-trial-license-for-consul-enterprise).

Automatic License Retrieval
CTS automatically retrieves a license from Consul on startup and then attempts to retrieve a new license once a day. If the current license is reaching its expiration date, CTS attempts to retrieve a license with increased frequency, as defined by the [License Expiration Date Handling](/consul/docs/nia/enterprise/license#license-expiration-handling).

~> Enabling automatic license retrieval is recommended when using HCP Consul Dedicated, as HCP Consul Dedicated licenses expire more frequently than Consul Enterprise licenses. Without auto-retrieval enabled, you have to restart CTS every time you load a new license.

Setting the License Manually

If a license needs to be manually set, choose one of the following methods (in order of precedence) to set the license:

1. Set the `CONSUL_LICENSE` environment variable to the license string.

 ```shell-session
 export CONSUL_LICENSE=<LICENSE_VALUE>
 ```

1. Set the `CONSUL_LICENSE_PATH` environment variable to the path of the file containing the license.

 ```shell-session
 export CONSUL_LICENSE_PATH=<PATH>/<TO>/<FILE>
 ```

```

1. To
 point to the file containing the license, in the configuration file, configure the
[`license`](/consul/docs/nia/configuration#license) path option.

```hcl
license {
  path = "<PATH>/<TO>/<FILE>"
}
```

1. To point to the file containing the license, in the configuration file, configure the
[`license_path`](/consul/docs/nia/configuration#license_path) option i. **Deprecated in CTS 0.6.0 and will be removed in a future release. Use [license block](/consul/docs/nia/configuration#license) instead.**

```hcl
license_path = "<PATH>/<TO>/<FILE>"
```

~> **Note**: the [options to set the license and the order of
precedence](/consul/docs/enterprise/license/overview#binaries-without-built-in-licenses) are the same as Consul Enterprise server agents.
Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.

Updating the License Manually
To update the license
 when it expires or is near the expiration date and automatic license retrieval is disabled:

1. Update the license environment variable or configuration with the new license value or path to the new license file
1. Stop and restart CTS Enterprise

Once CTS Enterprise starts again, it will pick up the new license and run the tasks with any changes that may have occurred between the stop and restart period.

License Expiration Handling

Licenses have an expiration date and a termination date. The termination date is a time at or after the license expires. CTS Enterprise will cease to function once the termination date has passed.

The time between the expiration and termination dates is a grace period. Grace periods are generally 24-hours, but you should refer to your license agreement for complete terms of your grace period.

When approaching expiration and termination, by default, CTS Enterprise will attempt to retrieve a new license. If auto-retrieval is disabled, CTS Enterprise will
```

provide notifications in the system logs:

Time period	Behavior - auto-retrieval enabled (default)	Behavior - auto-retrieval disabled
30 days before expiration	License retrieval attempt every 24-hours	Warning-level log every 24-hours
7 days before expiration	License retrieval attempt every 1 hour	Warning-level log every 1 hour
1 day before expiration	License retrieval attempt every 5 minutes	Warning-level log every 5 minutes
1 hour before expiration	License retrieval attempt every 1 minute	Warning-level log every 1 minute
At or after expiration (before termination)	License retrieval attempt every 1 minute	Error-level log every 1 minute
At or after termination	Error-level log and exit	Error-level log and exit

~> **Note**: Notification frequency and [grace period](/consul/docs/enterprise/license/faq#q-is-there-a-grace-period-when-licenses-expire) behavior is the same as Consul Enterprise.

/*!
* clipboard.js v2.0.11
* https://clipboardjs.com/
*
* Licensed MIT Zeno Rocha
*/

/*!
* focus-trap 6.9.4
* @license MIT, https://github.com/focus-trap/focus-trap/blob/master/LICENSE
*/

/*! ***
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LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR
OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR
PERFORMANCE OF THIS SOFTWARE.
*** */

/**
* @license

```
* Copyright 2017 Google LLC
* SPDX-License-Identifier: BSD-3-Clause
*/

/**
* @license
* Copyright 2019 Google LLC
* SPDX-License-Identifier: BSD-3-Clause
*/
{{!
 Copyright (c) HashiCorp, Inc.
 SPDX-License-Identifier: BUSL-1.1
}}

{{#if (gt items.length 0)}}
<ListCollection
 class="consul-intention-permission-list{{if (not onclick) ' readonly'}}"
 @scroll="native"
 @items={{items}}
 @partial={{5}}
as |item|>
 <BlockSlot @name="details">
   <div onclick={{action (optional onclick) item}}>
     <strong class={{concat 'intent-' item.Action}}>{{capitalize item.Action}}</strong>
{{#if (gt item.HTTP.Methods.length 0)}}
       <dl class="permission-methods">
         <dt>
           <Tooltip>
             Methods
           </Tooltip>
         </dt>
         <dd>
{{#each item.HTTP.Methods as |item|}}
           {{item}}
{{/each}}
         </dd>
       </dl>
{{/if}}
{{#if item.HTTP.Path}}
       <dl class="permission-path">
         <dt>
           <Tooltip>
             {{item.HTTP.PathType}}
           </Tooltip>
         </dt>
         <dd>
           {{item.HTTP.Path}}
         </dd>
```

```
      </dl>
{{/if}}
{{#each item.HTTP.Header
 as |item|}}
      <dl class="permission-header">
        <dt>
          <Tooltip>
            Header
          </Tooltip>
        </dt>
        <dd>
          {{item.Name}} {{route-match item}}
        </dd>
      </dl>
{{/each}}
  </div>
 </BlockSlot>
{{#if onclick}}
 <BlockSlot @name="actions" as |Actions|>
  <Actions as |Action|>
    <Action data-test-edit-action @onclick={{action (optional onclick) item}} @close={{true}}>
      <BlockSlot @name="label">
        Edit
      </BlockSlot>
    </Action>
    <Action data-test-delete-action @onclick={{action ondelete item}} class="dangerous">
      <BlockSlot @name="label">
        Delete
      </BlockSlot>
      <BlockSlot @name="confirmation" as |Confirmation|>
        <Confirmation class="warning">
          <BlockSlot @name="header">
            Confirm delete
          </BlockSlot>
          <BlockSlot @name="body">
            <p>
              Are you sure you
 want to delete this permission?
            </p>
          </BlockSlot>
          <BlockSlot @name="confirm" as |Confirm|>
            <Confirm>Delete</Confirm>
          </BlockSlot>
        </Confirmation>
      </BlockSlot>
    </Action>
  </Actions>
 </BlockSlot>
```

```
{{/if}}
</ListCollection>
{{/if}}
{
 "name": "envoy.filters.http.rbac",
 "typedConfig": {
  "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
  "rules": {
   "policies": {
    "consul-intentions-layer7-0": {
     "permissions": [
      {
       "andRules": {
        "rules": [
         {
          "andRules": {
           "rules": [
            {
             "urlPath": {
              "path": {
               "prefix": "/v1"
              }
             }
            },
            {
             "header": {
              "name": "x-foo",
              "presentMatch": true
             }
            }
           ]
          }
         },
         {
          "notRule": {
           "andRules": {

           "rules": [
              {
               "urlPath": {
                "path": {
                 "exact": "/v1/secret"
                }
               }
              },
              {
               "header": {
                "name": "x-baz",
```

```
                "presentMatch": true
               }
              },
              {
               "header": {
                "name": "x-bar",
                "presentMatch": true
               }
              }
             ]
            }
           }
          },
          {
           "notRule": {
            "andRules": {
             "rules": [
              {

"urlPath": {
                "path": {
                 "exact": "/v1/admin"
                }
               }
              },
              {
               "header": {
                "name": "x-baz",
                "presentMatch": true
               }
              },
              {
               "header": {
                "name": "x-bar",
                "presentMatch": true
               }
              }
             ]
            }
           }
          }
         ]
        }
       },
       {
        "andRules": {
         "rules": [
          {
```

```
                "andRules": {
                  "rules": [
                    {

  "urlPath": {
                        "path": {
                          "prefix": "/v2"
                        }
                      }
                    },
                    {
                      "header": {
                        "name": "x-foo",
                        "presentMatch": true
                      }
                    }
                  ]
                }
              },
              {
                "notRule": {
                  "andRules": {
                    "rules": [
                      {
                        "urlPath": {
                          "path": {
                            "exact": "/v2/secret"
                          }
                        }
                      },
                      {
                        "header": {
                          "name": "x-baz",
                          "presentMatch":
true
                        }
                      },
                      {
                        "header": {
                          "name": "x-bar",
                          "presentMatch": true
                        }
                      }
                    ]
                  }
                }
              },
              {
```

```
                "notRule": {
                  "andRules": {
                    "rules": [
                      {
                        "urlPath": {
                          "path": {
                            "exact": "/v2/admin"
                          }
                        }
                      },
                      {
                        "header": {
                          "name": "x-baz",
                          "presentMatch": true
                        }
                      },

          {
                        "header": {
                          "name": "x-bar",
                          "presentMatch": true
                        }
                      }
                    ]
                  }
                }
              }
            ]
          }
        }
      ],
      "principals": [
        {
          "authenticated": {
            "principalName": {
              "safeRegex": {
                "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
              }
            }
          }
        }
      ]
    }
  }
}
}
```

```
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

.agentless-node-notice .hds-alert__title {
 display: flex;
 justify-content: space-between;
}
```

Mozilla Public License 2.0 (MPLv2.0)

```
---
layout: commands
page_title: 'Commands: License'
description: >
 The license command provides a datacenter-level view of the Consul
 Enterprise license.
---

# Consul License

Command: `consul license`

<EnterpriseAlert />

The `license` command provides a list of all datacenters that use the Consul Enterprise license applied to the current datacenter.

~> **Warning**: Consul 1.10.0 removed the ability to set and reset the license using the CLI.
See the [licensing documentation](/consul/docs/enterprise/license/overview) for more information about
Consul Enterprise license management.

If ACLs are enabled then a token with operator privileges may be required in
order to use this command. Requests are forwarded internally to the leader
if required, so this can be run from any Consul node in a cluster. See the
[ACL Guide](/consul/tutorials/security/access-control-setup-production) for more information.

```text
Usage: consul license <subcommand> [options] [args]

 This command has subcommands
 for managing the Consul Enterprise license
 Here are some simple examples, and more detailed examples are
 available in the subcommands or the documentation.

 Install a new license from a file:

    $ consul license put @consul.license
```
```

Install a new license from stdin:

    $ consul license put -

Install a new license from a string:

    $ consul license put "<license blob>"

Retrieve the current license:

    $ consul license get

Inspect a license:

    $ consul license inspect "<path to license file>"

Reset the current license:

    $ consul license reset

For more examples, ask for subcommand help or view the documentation.

Subcommands:
  get   Get the active license
  inspect   Inspect a signed license
  put   Puts a new license in the datacenter
  reset   Resets the license in the datacenter

```

## inspect

This command inspects and validates a license. Just like a Consul agent it
can load the license from a file
 on disk or from the `CONSUL_LICENSE` and
`CONSUL_LICENSE_PATH` environment variables.

Usage: `consul license inspect [<options>] [<license file>]`

Inspect a license contained in a file:

```
$ consul license inspect consul.hclic
```

Inspect a license loaded from the environment:

```

$ consul license inspect
```

This will look at the CONSUL_LICENSE environment variable first
and if not present then we will look for the file specified
by the CONSUL_LICENSE_PATH environment variable.

The output looks like this:

```
Source: /consul/config/consul.hclic (path from the CONSUL_LICENSE_PATH environment variable)
Product: consul
License ID: 6089174b-a713-74cf-4c8d-856b86f1ce50
Customer ID: 7c020610-60a2-7ccb-c210-20d899e5f3b4
Installation ID: *
Issue Time: 2020-09-14 19:45:56.212195875 +0000 UTC
Start Time: 2020-09-14 00:00:00 +0000 UTC
Expiration Time: 2021-09-14 23:59:59.999 +0000 UTC
Termination Time: 2021-09-14 23:59:59.999 +0000 UTC
Modules:
    Global Visibility, Routing and Scale
     Governance and Policy
Features:
    Automated Backups
    Automated Upgrades
    Enhanced Read Scalability
    Network Segments
    Redundancy Zone
    Advanced Network Federation
    Namespaces
    SSO
    Audit Logging
    Admin Partitions

License is valid

```

## put

-> **Deprecated** The ability to manage the cluster's license via the CLI
was removed in Consul 1.10. While the CLI command still exists it will
always return an error. This command will be fully removed in a future release.

Corresponding HTTP API Endpoint: [\[PUT\] /v1/operator/license](/consul/api-docs/operator/license#updating-the-consul-license)

This command sets the Consul Enterprise license.
```

The table below shows this command's [required ACLs](/consul/api-docs/api-structure#authentication). Configuration of
[blocking queries](/consul/api-docs/features/blocking) and [agent caching](/consul/api-docs/features/caching) are not supported from commands, but may be
 from the corresponding HTTP endpoint.

ACL Required
`operator:write`

Usage: `consul license put [options] LICENSE`

The output looks like this:

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffc-e85e-0830-c0822c1f5f2b
Expires At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
      Automated Backups
      Automated Upgrades
      Enhanced Read Scalability
      Network Segments
      Redundancy Zone
      Advanced Network Federation
```

API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'

get

Corresponding HTTP API Endpoint: [\[GET\] /v1/operator/license](/consul/api-docs/operator/license#getting-the-consul-license)

This command gets the Consul Enterprise license. If the leader hasn't been updated with the newer license, the followers
will display the outdated license in their GET output.

The table below

shows this command's [required ACLs](/consul/api-docs/api-structure#authentication). Configuration of [blocking queries](/consul/api-docs/features/blocking) and [agent caching](/consul/api-docs/features/caching) are not supported from commands, but may be from the corresponding HTTP endpoint.

ACL Required
`none`

Usage: `consul license get [options]`

The output looks like this:

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffc-e85e-0830-c0822c1f5f2b
Expires At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
    Automated Backups
    Automated Upgrades
    Enhanced Read Scalability
    Network Segments
    Redundancy Zone
    Advanced Network Federation
```

API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'

reset

-> **Deprecated** The ability to manage the cluster's license via the CLI
was
removed in Consul 1.10. While the CLI command still exists it will
always return an error. This command will be fully removed in a future release.

Corresponding HTTP API Endpoint: [\[DELETE\] /v1/operator/license](/consul/api-docs/operator/license#resetting-the-consul-license)

Resets license for the datacenter to the one builtin in Consul binary, if it is still valid.
If the builtin license is invalid, the current one stays active.

The table below shows this command's [required ACLs](/consul/api-docs/api-structure#authentication).

Configuration of
[blocking queries](/consul/api-docs/features/blocking) and [agent caching](/consul/api-docs/features/caching)
are not supported from commands, but may be from the corresponding HTTP endpoint.

ACL Required
`operator:write`

Usage: `consul license reset [options]`

The output looks like this:

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffc-e85e-0830-c0822c1f5f2b
Expires
 At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
      Automated Backups
      Automated Upgrades
      Enhanced Read Scalability
      Network Segments
      Redundancy Zone
      Advanced Network Federation
```

API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'

```
{
 "name": "envoy.filters.http.rbac",
 "typedConfig": {
  "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
  "rules": {
   "policies": {
    "consul-intentions-layer7-0": {
     "permissions": [
      {
       "andRules": {
        "rules": [
         {
          "urlPath": {
           "path": {
```

```
          "prefix": "some-path"
        }
       }
      },
      {
       "andRules": {
        "rules": [
         {
          "metadata": {
           "filter": "envoy.filters.http.jwt_authn",
           "path": [
            {
             "key": "jwt_payload_okta"
            },
            {
             "key": "iss"
            }

           ],
           "value": {
            "stringMatch": {
             "exact": "mytest.okta-issuer"
            }
           }
          }
         },
         {
          "metadata": {
           "filter": "envoy.filters.http.jwt_authn",
           "path": [
            {
             "key": "jwt_payload_okta"
            },
            {
             "key": "roles"
            }
           ],
           "value": {
            "stringMatch": {
             "exact": "testing"
            }
           }
          }
         }

]
       }
      }
```

```
            ]
           }
          }
         ],
         "principals": [
          {
           "authenticated": {
            "principalName": {
             "safeRegex": {
              "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
             }
            }
           }
          }
         ]
        }
       }
      }
     }
    }
```

```
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

section[data-route='dc.show.license'] {
 @extend %license-route;
}
%license-route .validity {
 @extend %license-validity;
}
%license-route aside {
 @extend %license-route-learn-more;
}

%license-route h2 {
 @extend %display-400-semibold;
}

%license-validity p {
 color: var(--token-color-foreground-faint);
}
%license-validity dl {
 @extend %horizontal-kv-list;
 @extend %body-300-regular;
}
%license-validity dl .expired + dd {
 @extend %visually-hidden;
```

```
}
%license-validity dl dt::before {
 content: '';
 margin-right: 0.25rem; /* 4px */
}
%license-validity dl .expired::before {
 --icon-name: icon-x-circle;
 --icon-color: var(--token-color-foreground-critical);
}
%license-validity dl .warning::before {
 --icon-name: icon-alert-circle;
 --icon-color: var(--token-color-foreground-warning);
}
%license-validity dl .valid:not(.warning)::before {
 --icon-name: icon-check-circle;
 --icon-color: var(--token-color-foreground-success);
}

%license-route-learn-more
 {
 @extend %panel;
 box-shadow: none;
 padding: var(--padding-y) var(--padding-x);
 width: 40%;
 min-width: 413px;
 margin-top: 1rem; /* 16px */
}
%license-route-learn-more header > :first-child {
 @extend %display-300-semibold;
}
%license-route-learn-more header {
 margin-bottom: 1rem; /* 16px */
}
{{!
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}}

<Route
 @name={{routeName}}
as |route|>
 <DataLoader
   @src={{
     uri '/${partition}/${nspace}/${dc}/license'
     (hash
       partition=route.params.partition
       nspace=route.params.nspace
       dc=route.params.dc
```

```
    )
  }}
 as |loader|>

{{#let
 loader.data
as |item|}}
  <BlockSlot @name="error">
    <ErrorState
      @error={{loader.error}}
      @login={{route.model.app.login.open}}
    />
  </BlockSlot>

  <BlockSlot @name="disconnected" as |after|>
    {{#if (eq loader.error.status "404")}}
      <Hds::Toast @color='warning'
        {{notification
          sticky=true
        }} as |T|>
        <T.Title>Warning!</T.Title>
        <T.Description>This service has been deregistered and no longer exists in the catalog.</T.Description>
      </Hds::Toast>
    {{else if (eq loader.error.status "403")}}
      <Hds::Toast @color='critical'
        {{notification
          sticky=true
        }} as |T|>
        <T.Title>Error!</T.Title>
        <T.Description>You no longer have access to this service.</T.Description>
      </Hds::Toast>
    {{else}}
      <Hds::Toast @color='warning'
        {{notification
          sticky=true
        }} as |T|>
        <T.Title>Warning!</T.Title>
        <T.Description>An error was returned whilst loading this data, refresh to try again.</T.Description>
      </Hds::Toast>
    {{/if}}
  </BlockSlot>

  <BlockSlot @name="loaded">
    <div class="tab-section">
      <section
        class={{class-map
          'validity'
          (array 'valid' item.Valid)
```

```
    }}
   >
    <header>
     <h2>
      {{compute (fn route.t 'expiry.header')}}
     </h2>
    </header>

    <p>
     {{compute (fn route.t 'expiry.${type}.body'
      (hash
       type=(if item.Valid 'valid' 'expired')

  date=(format-time item.License.expiration_time
         year='numeric'
         month='long'
         day='numeric'
        )
        time=(format-time item.License.expiration_time
         hour12=true
         hour='numeric'
         hourCycle='h12'
         minute='numeric'
         second='numeric'
         timeZoneName='short'
        )
        htmlSafe=true
      )
     )}}
    </p>

    <dl>
     <dt class={{class-map
       (array 'valid' item.Valid)
       (array 'expired' (not item.Valid))
       (array 'warning' (temporal-within item.License.expiration_time 2629800000))
      }}
     >
      {{compute (fn route.t 'expiry.${type}.header'
       (hash
        type=(if item.Valid 'valid' 'expired')
       )
      )}}
     </dt>

<dd>
      {{temporal-format item.License.expiration_time}}
     </dd>
```

```
        </dl>

        <aside>
          <header>
            <h3>
              {{compute (fn route.t 'documentation.title')}}
            </h3>
          </header>
          <div class="flex gap-1.5 flex-col">
            <Hds::Link::Standalone
              @text={{compute (fn route.t 'documentation.links.license-expiration.text')}}
              @href='{{concat (env 'CONSUL_DOCS_URL') (compute (fn route.t 'documentation.links.license-
expiration.link'))}}'
              @icon='docs-link'
              @iconPosition='trailing'
            />
            <Hds::Link::Standalone
              @text={{compute (fn route.t 'documentation.links.renewing-license.text')}}
              @href='{{concat (env 'CONSUL_DOCS_URL') (compute (fn route.t 'documentation.links.renewing-
license.link'))}}'
              @icon='docs-link'
              @iconPosition='trailing'

          />
            <Hds::Link::Standalone
              @text={{compute (fn route.t 'documentation.links.applying-new-license.text')}}
              @href='{{concat (env 'CONSUL_DOCS_URL') (compute (fn route.t 'documentation.links.applying-new-
license.link'))}}'
              @icon='docs-link'
              @iconPosition='trailing'
            />
          </div>
        </aside>

      </section>
    </div>
  </BlockSlot>
{{/let}}
 </DataLoader>
</Route>
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// SPDX-License-Identifier: MPL-2.0

package api

import (
 "io"
 "strings"
```

```
 "time"
)

type License struct {
 // The unique identifier of the license
 LicenseID string `json:"license_id"`

 // The customer ID associated with the license
 CustomerID string `json:"customer_id"`

 // If set, an identifier that should be used to lock the license to a
 // particular site, cluster, etc.
 InstallationID string `json:"installation_id"`

 // The time at which the license was issued
 IssueTime time.Time `json:"issue_time"`

 // The time at which the license starts being valid
 StartTime time.Time `json:"start_time"`

 // The time after which the license expires
 ExpirationTime time.Time `json:"expiration_time"`

 // The time at which the license ceases to function and can
 // no longer be used in any capacity
 TerminationTime time.Time `json:"termination_time"`

 // Whether the license will ignore termination
 IgnoreTermination bool `json:"ignore_termination"`

 //
 The product the license is valid for
 Product string `json:"product"`

 // License Specific Flags
 Flags map[string]interface{} `json:"flags"`

 // Modules is a list of the licensed enterprise modules
 Modules []string `json:"modules"`

 // List of features enabled by the license
 Features []string `json:"features"`
}

type LicenseReply struct {
 Valid    bool
 License  *License
 Warnings []string
```

```
}

func (op *Operator) LicenseGet(q *QueryOptions) (*LicenseReply, error) {
 var reply LicenseReply
 if _, err := op.c.query("/v1/operator/license", &reply, q); err != nil {
  return nil, err
 } else {
  return &reply, nil
 }
}

func (op *Operator) LicenseGetSigned(q *QueryOptions) (string, error) {
 r := op.c.newRequest("GET", "/v1/operator/license")
 r.params.Set("signed", "1")
 r.setQueryOptions(q)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return "", err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return "", err
 }

 data, err := io.ReadAll(resp.Body)
 if
 err != nil {
  return "", err
 }

 return string(data), nil
}

// LicenseReset will reset the license to the builtin one if it is still valid.
// If the builtin license is invalid, the current license stays active.
//
// DEPRECATED: Consul 1.10 removes the corresponding HTTP endpoint as licenses
// are now set via agent configuration instead of through the API
func (op *Operator) LicenseReset(opts *WriteOptions) (*LicenseReply, error) {
 var reply LicenseReply
 r := op.c.newRequest("DELETE", "/v1/operator/license")
 r.setWriteOptions(opts)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return nil, err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
```

```
 return nil, err
 }
 if err := decodeBody(resp, &reply); err != nil {
  return nil, err
 }
 return &reply, nil
}

// LicensePut will configure the Consul Enterprise license for the target datacenter
//
// DEPRECATED: Consul 1.10 removes the corresponding HTTP endpoint as licenses
// are now set
 via agent configuration instead of through the API
func (op *Operator) LicensePut(license string, opts *WriteOptions) (*LicenseReply, error) {
 var reply LicenseReply
 r := op.c.newRequest("PUT", "/v1/operator/license")
 r.setWriteOptions(opts)
 r.body = strings.NewReader(license)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return nil, err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return nil, err
 }

 if err := decodeBody(resp, &reply); err != nil {
  return nil, err
 }

 return &reply, nil
}
---
layout: docs
page_title: Enterprise Licenses
description: >-
 Consul Enterprise server, client, and snapshot agents require a license on startup in order to use Enterprise features.
Learn how to apply licenses using environment variables or configuration files.
---

# Consul Enterprise License

## Licensing Overview

All Consul Enterprise agents must be licensed when they are started. Where that license comes from will depend
on which binary is in use, whether the agent is a server, client or snapshot agent, and whether ACLs have been
enabled for the cluster.
```

-> ** Consul Enterprise 1.10.0 removed temporary licensing.** Prior to 1.10.0, Consul Enterprise agents could start without a license and then have a license applied to them later on via the CLI or API. That functionality has been removed and replaced with the ability to load licenses from the agent's configuration or environment. Also, prior to 1.10.0, server agents would automatically propagate the license between themselves.
This no longer occurs and the license must be present on each server agent when it is started.

Consul Enterprise 1.14.0, when running on Kubernetes, removed client agents and replaced these with virtual agents.
Virtual agents are nodes that Consul service mesh services run on. HashiCorp uses virtual agents to determine license entitlements for customers on per-node licensing and pricing agreements.

-> Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.

Applying a License

For Consul Enterprise 1.10.0 or greater, a license must be available at the time the agent starts.
For server agents this means that they must either have the [`license_path`](/consul/docs/agent/config/config-files#license_path) configuration set or have a license configured in the servers environment with the `CONSUL_LICENSE` or `CONSUL_LICENSE_PATH` environment variables. Both the configuration item and the `CONSUL_LICENSE_PATH` environment variable point to a file containing the license whereas the `CONSUL_LICENSE` environment variable should contain the license as the value. If multiple variables are set, the following order of precedence applies:

1. `CONSUL_LICENSE` environment variable
2. `CONSUL_LICENSE_PATH` environment variable
3. `license_path` configuration item.

Client agents and [snapshot agents](/consul/docs/enterprise/backups) may also be licensed in the very same manner.
However, to avoid the need to configure the license on many client agents and snapshot agents, those agents have the capability to retrieve the license automatically under the conditions described below.

Virtual agents do not need the license to run.

Updating the license for an agent depends on the method you used to apply the license.
- **If you used the `CONSUL_LICENSE` environment variable**: After updating the environment variable, restart the affected agents.
- **If you used the `CONSUL_LICENSE_PATH` environment variable**: Update the license file first. Then, restart the affected agents.
- **If you used the `license_path` configuration item**: Update the license file first. Then, run [`consul reload`](/consul/commands/reload) for the affected agents.

Client Agent License Retrieval

When a client agent starts without a license in its configuration or environment, it will try to retrieve the license from the servers via RPCs. That RPC always requires a valid non-anonymous ACL token to authorize the request but the token doesn't need any particular permissions. As the license is required before the client actually joins the cluster, where to make those RPC requests to is inferred from the [`retry_join`](/consul/docs/agent/config/config-files#retry_join) configuration. If `retry_join` is unset or no [`agent` token](/consul/docs/agent/config/config-files#acl_tokens_agent) is set then the client agent will immediately shut itself down.

If all preliminary checks
 pass the client agent will attempt to reach out to any server on its RPC port to
request the license. These requests will be retried for up to 5 minutes and if it is unable to retrieve a license within that time frame it will shut itself down.

If ACLs are disabled then the license must be provided to the client agent through one of the three methods listed below.
Failure in providing the client agent with a licence will prevent the client agent from joining the cluster.

1. `CONSUL_LICENSE` environment variable
2. `CONSUL_LICENSE_PATH` environment variable
3. `license_path` configuration item.

Snapshot Agent License Retrieval

The snapshot agent has similar functionality to the client agent for automatically retrieving the license. However, instead of requiring a server agent to talk to, the snapshot agent can request the license from the server or client agent it would use for all other operations. It still requires an ACL token to authorize the request. Also like client agents,
 the snapshot agent will shut itself down after being unable to retrieve the license for 5
minutes.
```
/**
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*/

.consul-intention-permission-header-list {
 dt::before {
   @extend %with-glyph-icon;
   content: 'H';
 }
}
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/
```

```
.consul-intention-permission-list {
 .detail > div {
   display: flex;
   width: 100%;
 }
 strong {
   margin-right: 8px;
 }
}
/**
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*/

.consul-intention-permission-list {
 dt::before {
   @extend %with-glyph-icon;
 }
 dl.permission-methods dt::before {
   content: 'M';
 }
 dl.permission-path dt::before {
   content: 'P';
 }
 dl.permission-header dt::before {
   content: 'H';
 }
}
{{!
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}}

{{#if isVisible}}
 <Hds::Alert @type="inline" class='mb-3 mt-2 agentless-node-notice' data-test-node-agentless-notice as |A|>
   <A.Title>
     <span>{{t 'routes.dc.nodes.index.agentless.notice.header'}}</span>
     <Hds::Button
       @color='secondary'
       @text='Dismiss notice'
       {{on 'click' this.dismissAgentlessNotice}}
       @icon='x'
       @size='small'
       @isIconOnly={{true}}
     />
   </A.Title>
   <A.Description>{{t 'routes.dc.nodes.index.agentless.notice.body'}}</A.Description>
   <A.Link::Standalone @href='{{env "CONSUL_DOCS_DEVELOPER_URL"}}/connect/dataplane'
```

```
                @text={{t 'routes.dc.nodes.index.agentless.notice.footer'}}
                @icon='docs-link'
                @iconPosition='trailing' />
 </Hds::Alert>
{{/if}}
/*!
* QUnit 2.19.4
* https://qunitjs.com/
*
* Copyright OpenJS Foundation and other contributors
* Released under the MIT license
* https://jquery.org/license
*/
{{!
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}}

<Hds::Alert @type="inline" class="mb-3 mt-2" as |A|>
 <A.Description>{{t "components.consul.intention.notice.permissions.body"}}</A.Description>
 <A.Link::Standalone
   @text={{t "components.consul.intention.notice.permissions.footer"}}
   @href="{{env 'CONSUL_DOCS_URL'}}/connect/intentions"
   @icon="docs-link"
   @iconPosition="trailing"
   @size="small"
 />
</Hds::Alert>
```

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Parameters

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```
{
 "name": "envoy.filters.http.jwt_authn",
 "typedConfig": {
  "@type": "type.googleapis.com/envoy.extensions.filters.http.jwt_authn.v3.JwtAuthentication",
  "providers": {
   "auth0": {
    "issuer": "another-issuer",
    "payloadInMetadata": "jwt_payload_auth0",
    "remoteJwks": {
     "asyncFetch": {
      "fastListener": true
     },
     "httpUri": {
      "cluster": "jwks_cluster_auth0",
      "timeout": "1s",
      "uri": "https://example-auth0.com/.well-known/jwks.json"
     }
    }
   },
   "okta": {
```

```
    "issuer": "test-issuer",
    "payloadInMetadata": "jwt_payload_okta",
    "remoteJwks": {
     "asyncFetch": {
      "fastListener": true
     },
     "httpUri": {
      "cluster": "jwks_cluster_okta",
      "timeout": "1s",
      "uri": "https://example-okta.com/.well-known/jwks.json"
     }
    }
   }
  },
  "rules": [
   {

"match": {
     "prefix": "/"
    },
    "requires": {
     "requiresAll": {
      "requirements": [
       {
        "requiresAny": {
         "requirements": [
          {
           "providerName": "okta"
          },
          {
           "allowMissingOrFailed": {}
          }
         ]
        }
       },
       {
        "requiresAny": {
         "requirements": [
          {
           "providerName": "auth0"
          },
          {
           "allowMissingOrFailed": {}
          }
         ]
        }
       }
      ]
```

```
        }
      }
    }
  ]
 }
}
{{!
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 SPDX-License-Identifier: BUSL-1.1
}}

<div
 ...attributes
 class="consul-intention-permission-form"
>
<FormGroup
 @name={{name}}
as |group|>

 {{yield (hash
  submit=(action 'submit' changeset)
  reset=(action 'reset' changeset)

  isDirty=(and changeset.isValid)
  changeset=changeset
 )}}

 <fieldset>
  <div data-property="action">
   <span class="label">
    Should this permission allow the source connect to the destination?
   </span>
   <div role="radiogroup" class={{if changeset.error.Action ' has-error'}}>
    {{#each intents as |intent|}}
     <label>
      <span>{{capitalize intent}}</span>
      <input
       type="radio"
       name="Action"
       value={{intent}}
       checked={{if (eq changeset.Action intent) 'checked'}}
       onchange={{action (changeset-set changeset 'Action') value="target.value"}}
      />
     </label>
    {{/each}}
   </div>
  </div>
 </fieldset>
```

```
<fieldset>
  <header>
    <h2>Path</h2>
  </header>
  <div>
      <group.Element
        @name="PathType"
        @type="select"
      as |el|>
        <el.Label>
          Path type
        </el.Label>
        <PowerSelect
          @options={{pathTypes}}
          @selected={{pathType}}
          @onChange={{action 'change' 'HTTP.PathType' changeset}} as |Type|>
            {{get pathLabels Type}}
        </PowerSelect>
      </group.Element>

{{#if shouldShowPathField}}
      <group.Element
        @name="Path"
        @error={{changeset-get changeset 'error.HTTP.Path'}}
      as |el|>
        <el.Label>
          {{get pathLabels pathType}}
        </el.Label>
        <el.Text
          @value={{changeset-get changeset 'HTTP.Path'}}
          oninput={{action 'change' 'HTTP.Path' changeset}}
        />
        <State @state={{el.state}} @matches="error">
          <el.Error>

           {{#if (eq (changeset-get changeset 'HTTP.Path') 'Regex')}}
             Path Regex should not be blank
           {{else}}
             Path should begin with a '/'
           {{/if}}
          </el.Error>
        </State>
      </group.Element>
{{/if}}

  </div>
 </fieldset>
```

```
 <fieldset>
   <h2>Methods</h2>
   <div class="type-toggle">
     <span>All methods are applied by default unless specified</span>
     <group.Element
       @name="allMethods"
     as |el|>
       <el.Checkbox
         checked={{if allMethods 'checked'}}
         onchange={{action 'change' 'allMethods' changeset}}
       />
       <el.Label>
         All Methods
       </el.Label>
     </group.Element>
   </div>

 {{#if shouldShowMethods}}
   <div class="checkbox-group" role="group">
     {{#each methods as |method|}}
       <label class="type-checkbox">
         <input
           type="checkbox"
           name="method"
           value={{method}}

   checked={{if (includes method changeset.HTTP.Methods) 'checked'}}
           onchange={{action 'change' 'method' changeset}}
         />
         <span>{{method}}</span>
       </label>
     {{/each}}
   </div>
 {{/if}}
 </fieldset>

 <fieldset>
   <h2>Headers</h2>

   <Consul::Intention::Permission::Header::List
     @items={{changeset-get changeset 'HTTP.Header'}}
     @ondelete={{action 'delete' 'HTTP.Header' changeset}}
   as |headerList|>

   </Consul::Intention::Permission::Header::List>

   <Consul::Intention::Permission::Header::Form
```

```
    @onsubmit={{action 'add' 'HTTP.Header' changeset}}
  as |headerForm|>
    <Ref @target={{this}} @name="headerForm" @value={{headerForm}} />
  </Consul::Intention::Permission::Header::Form>

  <Hds::ButtonSet>
    <Hds::Button
      data-test-add-header
      @text='Add{{if (gt (get (changeset-get changeset 'HTTP.Header') 'length') 0) ' another' ''}} header'
      @color='primary'
      disabled={{if (not this.headerForm.isDirty)
 'disabled'}}
      onclick={{action this.headerForm.submit}}
    />
    <Hds::Button
      @text='Cancel'
      @color='secondary'
      onclick={{action this.headerForm.reset}}
    />
  </Hds::ButtonSet>
 </fieldset>
 </FormGroup>
</div>
```

1.136 prometheus-common 0.64.0

1.136.1 Available under license :

Common libraries shared by Prometheus Go components.
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1.137 etcd 3.5.16-r6

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1.138 github.com/redis/go-redis/v9 9.9.0

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1.139 go-redis 9.9.0

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1.140 common 0.64.0

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1.141 google.golang.org/genproto/googleapis/rpc 0.0.0-20250603155806-513f23925822

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1.142 genproto-googleapis-rpc 0.0.0-20250603155806-513f23925822

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1.143 google-golang-org-grpc 1.73.0

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1.145 genproto-googleapis-api 0.0.0-20250603155806-513f23925822

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1.146 go.etcd.io/etcd/client/v3 3.6.0

1.146.1 Available under license :

Features

This document provides an overview of etcd features and general development guidelines for adding and deprecating them. The project maintainers can override these guidelines per the need of the project following the project governance.

Overview

The etcd features fall into three stages, experimental, stable, and unsafe.

Experimental

Any new feature is usually added as an experimental feature. An experimental feature is characterized as below:
- Might be buggy due to a lack of user testing. Enabling the feature may not work as expected.
- Disabled by default when added initially.
- Support for such a feature may be dropped at any time without notice
  - Feature-related issues may be given lower priorities.
  - It can be removed in the next minor or major release without following the feature deprecation policy unless it graduates to a stable future.

Stable

A stable feature is characterized as below:
- Supported as part of the supported releases of etcd.
-
May be enabled by default.
- Discontinuation of support must follow the feature deprecation policy.

Unsafe

Unsafe features are rare and listed under the `Unsafe feature:` section in the etcd usage documentation. By default, they are disabled. They should be used with caution following documentation. An unsafe feature can be removed in the next minor or major release without following the feature deprecation policy.

Development Guidelines

Adding a new feature

Any new enhancements to the etcd are typically added as an experimental feature. The general development requirements are listed below. They can be somewhat flexible depending on the scope of the feature and review discussions and will evolve over time.
- Open an issue
  - It must provide a clear need for the proposed feature.
  - It should list development work items as checkboxes. There must be one work item towards future graduation to a stable future.
  - Label the issue with `type/feature` and `experimental`.
  - Keep the issue open for tracking purposes until a decision is made on graduation.
- Open a Pull Request (PR)
  - Provide unit tests. Integration tests are also recommended as possible.
  - Provide robust e2e test coverage. If the feature being added is complicated or quickly needed, maintainers can decide to go with e2e tests for basic coverage initially and have robust coverage added at a later time before the feature graduation to the stable feature.
  - Provide logs for proper debugging.
  - Provide metrics and benchmarks as needed.
  - The Feature should be disabled by default.
  - Any configuration flags related to the implementation of the feature must be prefixed with `experimental` e.g. `--experimental-feature-name`.
  - Add a CHANGELOG entry.
- At least two maintainers must approve feature requirements and related code changes.

Graduating an Experimental feature to Stable

It is important that experimental features don't get stuck in that stage.
They should be revisited and moved to the stable stage following the graduation steps as described here.

Locate graduation candidate
Decide if an experimental feature is ready for graduation to the stable stage.

- Find the issue that was used to enable the experimental feature initially. One way to find such issues is to search for issues with `type/feature` and `experimental` labels.
- Fix any known open issues against the feature.
- Make sure the feature was enabled for at least one previous release. Check the PR(s) reference from the issue to see when the feature-related code changes were merged.

Provide implementation
If an experimental feature is found ready for graduation to the stable stage, open a Pull Request (PR) with the following changes.
- Add robust e2e tests if not already provided.
- Add a new stable feature flag identical to the experimental feature flag but without the `--experimental` prefix.
- Deprecate the experimental feature following the [feature deprecation
 policy](#Deprecating-a-feature).
- Implementation must ensure that both the graduated and deprecated experimental feature flags work as expected. Note that both these flags will co-exist for the timeframe described in the feature deprecation policy.
- Enable the graduated feature by default if needed.

At least two maintainers must approve the work. Patch releases should not be considered for graduation.

Deprecating a feature

Experimental
An experimental feature deprecates when it graduates to the stable stage.
- Add a deprecation message in the documentation of the experimental feature with a recommendation to use a related stable feature. e.g. `DEPRECATED. Use <feature-name> instead.`
- Add a `deprecated` label in the issue that was initially used to enable the experimental feature.

Stable
As the project evolves, a stable feature may sometimes need to be deprecated and removed. Such a situation should be handled using the steps below:
- Create an issue for tracking
 purposes.
- Add a deprecation message in the feature usage documentation before a planned release for feature deprecation. e.g. `To be deprecated in <release>.`. If a new feature replaces the `To be deprecated` feature, then also provide a message saying so. e.g. `Use <feature-name> instead.`.
- Deprecate the feature in the planned release with a message as part of the feature usage documentation. e.g. `DEPRECATED`. If a new feature replaces the deprecated feature, then also provide a message saying so. e.g. `DEPRECATED. Use <feature-name> instead.`.
- Add a `deprecated` label in the related issue.

Remove the deprecated feature in the following release. Close any related issue(s). At least two maintainers must approve the work. Patch releases should not be considered for deprecation.
Set up the local cluster

For testing and development deployments, the quickest and easiest way is to configure a local cluster. For a production deployment, refer to the [clustering][clustering] section.

Local standalone cluster

Starting a cluster

Run the following to deploy an etcd cluster as a standalone cluster:

```
$ ./etcd
...
```

If the `etcd` binary is not present in the current working directory, it might be located either at `$GOPATH/bin/etcd` or at `/usr/local/bin/etcd`. Run the command appropriately.

The running etcd member listens on `localhost:2379` for client requests.

Interacting with the cluster

Use `etcdctl` to interact with the running cluster:

1. Store an example key-value pair in the cluster:

   ```
   $ ./etcdctl put foo bar
   OK
   ```

   If OK is printed, storing the key-value pair is successful.

2. Retrieve the value of `foo`:

   ```
   $ ./etcdctl get foo
   bar
   ```

   If `bar` is returned, interaction with the etcd
   cluster is working as expected.

Local multi-member cluster

Starting a cluster

A `Procfile` at the base of the etcd git repository is provided to easily configure a local multi-member cluster. To start a multi-member cluster, navigate to the root of the etcd source tree and perform the following:

1. Install `goreman` to control Procfile-based applications:

   ```
   ```

```
$ go install github.com/mattn/goreman@latest
```

The installation will place executables in the $GOPATH/bin. If $GOPATH environment variable is not set, the tool will be installed into the $HOME/go/bin. Make sure that $PATH is set accordingly in your environment.

2. Start a cluster with `goreman` using etcd's stock Procfile:

```
$ goreman -f Procfile start
```

The members start running. They listen on `localhost:2379`, `localhost:22379`, and `localhost:32379` respectively for client requests.

Interacting with the cluster

Use `etcdctl` to interact with the running cluster:

1. Print
the list of members:

```
$ etcdctl --write-out=table --endpoints=localhost:2379 member list
```

The list of etcd members is displayed as follows:

```
+------------------+---------+--------+-----------------------+-----------------------+
|        ID        | STATUS  |  NAME  |       PEER ADDRS      |     CLIENT ADDRS      |
+------------------+---------+--------+-----------------------+-----------------------+
| 8211f1d0f64f3269 | started | infra1 | http://127.0.0.1:2380  | http://127.0.0.1:2379  |
| 91bc3c398fb3c146 | started | infra2 | http://127.0.0.1:22380 | http://127.0.0.1:22379 |
| fd422379fda50e48 | started | infra3 | http://127.0.0.1:32380 | http://127.0.0.1:32379 |
+------------------+---------+--------+-----------------------+-----------------------+
```

2. Store an example key-value pair in the cluster:

```
$ etcdctl put foo bar
OK
```

If OK is printed, storing the key-value pair is successful.

###
Testing fault tolerance

To exercise etcd's fault tolerance, kill a member and attempt to retrieve the key.

1. Identify the process name of the member to be stopped.

The `Procfile` lists the properties of the multi-member cluster. For example, consider the member with the process name, `etcd2`.

2. Stop the member:

```
# kill etcd2
$ goreman run stop etcd2
```

3. Store a key:

```
$ etcdctl put key hello
OK
```

4. Retrieve the key that is stored in the previous step:

```
$ etcdctl get key
hello
```

5. Retrieve a key from the stopped member:

```
$ etcdctl --endpoints=localhost:22379 get key
```

The command should display an error caused by connection failure:

```
2017/06/18 23:07:35 grpc: Conn.resetTransport failed to create client transport: connection error: desc = "transport: dial tcp 127.0.0.1:22379: getsockopt: connection refused"; Reconnecting to "localhost:22379"
Error:  grpc:
timed out trying to connect
```

6. Restart the stopped member:

```
$ goreman run restart etcd2
```

7. Get the key from the restarted member:

  ```
  $ etcdctl --endpoints=localhost:22379 get key
  hello
  ```

  Restarting the member re-establishs the connection. `etcdctl` will now be able to retrieve the key successfully. To learn more about interacting with etcd, read [interacting with etcd section][interacting].

[clustering]: https://etcd.io/docs/latest/op-guide/clustering/
[interacting]: https://etcd.io/docs/latest/dev-guide/interacting_v3/
Issue triage guidelines

Purpose

Speed up issue management.

The `etcd` issues are listed at <https://github.com/etcd-io/etcd/issues> and are identified with labels. For example, an issue that is identified as a bug will be set to the label `type/bug`.

The etcd project uses labels to indicate common attributes such as `area`, `type`, and `priority` of incoming issues.

New issues will often start without any labels, but typically `etcd` maintainers, reviewers, and members will add labels by following these triage guidelines. The detailed list of labels can be found at <https://github.com/etcd-io/etcd/labels>.

Scope

This document serves as the primary guidelines for triaging incoming issues in `etcd`.

All contributors are encouraged and welcome to help manage issues which will help reduce the burden on project maintainers, though the work and responsibilities discussed in this document are created with `etcd` project reviewers and members in mind as these individuals will have
 triage access to the etcd project which is a requirement for actions like applying labels or closing issues.

Refer to [etcd community membership](https://github.com/etcd-io/etcd/blob/main/Documentation/contributor-guide/community-membership.md) for guidance on becoming an etcd project member or reviewer.

Step 1 - Find an issue to triage

To get started you can use the following recommended issue searches to identify issues that are in need of triage:

* [Issues that have no labels](https://github.com/etcd-io/etcd/issues?q=is%3Aissue+is%3Aopen+sort%3Aupdated+no%3Alabel)
* [Issues created recently](https://github.com/etcd-io/etcd/issues?q=is%3Aissue+is%3Aopen+)
* [Issues not assigned but linked pr](https://github.com/etcd-io/etcd/issues?q=is%3Aopen+is%3Aissue+no%3Aassignee+linked%3Apr)

* [Issues with no comments](https://github.com/etcd-io/etcd/issues?q=is%3Aopen+is%3Aissue+comments%3A0+)
* [Issues with help wanted](https://github.com/etcd-io/etcd/issues?q=is%3Aopen+is%3Aissue+label%3A%22help+wanted%22+)

##
Step 2 - Check the issue is valid

Before we start adding labels or trying to work out a priority, our first triage step needs to be working out if the issue actually belongs to the etcd project and is not a duplicate.

Issues that don't belong to etcd

Sometimes issues are reported that belong to other projects that `etcd` use. For example, `grpc` or `golang` issues. Such issues should be addressed by asking the reporter to open issues in the appropriate other projects.

These issues can generally be closed unless a maintainer and issue reporter see a need to keep it open for tracking purposes. If you have triage permissions please close it, alternatively mention the @etcd-io/members group to request a member with triage access to close the issue.

Duplicate issues

If an issue is a duplicate, add a comment stating so along with a reference for the original issue and if you have triage permissions please close it, alternatively mention the @etcd-io/members
group to request a member with triage access close the issue.

Step 3 - Apply the appropriate type of label

Adding a `type` label to an issue helps create visibility on the health of the project and helps contributors identify potential priorities, i.e. addressing existing bugs or test flakes before implementing new features.

Support requests

As a general rule, the focus for etcd support is to address common themes in a broad way that helps all users, i.e. through channels like known issues, frequently asked questions, and high-quality documentation. To make the best use of project members time we should avoid providing 1:1 support if a broad approach is available.

Some people mistakenly use our GitHub bug report or feature request templates to file support requests. Usually, they are asking for help operating or configuring some aspect of etcd. Support requests for etcd should instead be raised as [discussions](https://github.com/etcd-io/etcd/discussions).

Common
types of support requests are:

1. Questions about configuring or operating existing well-documented etcd features, for example, <https://github.com/etcd-io/etcd/issues/15945>. Note - If an existing feature is not well documented please apply the `area/documentation` label and propose documentation improvements that would prevent future users from stumbling on the problem again.

2. Bug reports or questions about unsupported versions of etcd, for example <https://github.com/etcd-io/etcd/issues/15796>. When responding to these issues please refer to our [supported versions documentation](https://etcd.io/docs/latest/op-guide/versioning) and encourage the reporter to upgrade to a recent patch release of a supported version as soon as possible. We should limit the effort supporting users that do not make the effort to run a supported version of etcd or ensure their version is patched.

3. Bug reports that do not provide a complete list of steps to reproduce the issue and/or contributors are not able to reproduce the issue, for example, <https://github.com/etcd-io/etcd/issues/15740>. We should limit the effort we put into reproducing issues ourselves and motivate users to provide the necessary information to accept the bug report.

4. General questions that are filed using feature request or bug report issue templates, for example, <https://github.com/etcd-io/etcd/issues/15914>. Note - These types of requests may surface good additions to our [frequently asked questions](https://etcd.io/docs/v3.5/faq).

If you identify that an issue is a support request please:

1. Add the `type/support` or `type/question` label.

2. Add the following comment to inform the issue creator that discussions should be used instead and that this issue will be converted to a discussion.

> Thank you for your question, this support issue will be moved to our [Discussion Forums](https://github.com/etcd-io/etcd/discussions).
>
> We are trying to consolidate the channels to which questions for help/support are posted so that we can improve our efficiency in responding to your requests, and make it easier for you to find answers to frequently asked questions and how to address common use cases.
>
> We regularly see messages posted in multiple forums, with the full response thread only in one place or, worse, spread across multiple forums. Also, the large volume of support issues on GitHub is making it difficult for us to use issues to identify real bugs.
>
> Members of the etcd community use Discussion Forums to field support requests. Before posting a new question, please search these for answers to similar questions, and also familiarize yourself with:
>
> 1. [user documentation](https://etcd.io/docs/latest)
> 2. [frequently asked questions](https://etcd.io/docs/v3.5/faq)
>
> Again, thanks for using etcd and raising this question.
>
> The etcd team

3. Finally, click `Convert to discussion` on the right-hand panel, selecting the appropriate discussion category.

Bug reports

If an issue has been raised as a bug it should already have the `type/bug` label, however, if this is missing for an issue you determine to be a bug please add the label manually.

The next step is to validate if the issue is indeed a bug. If not, add a comment with the findings and close the trivial issue. For non-trivial issues, wait to hear back from the issue reporter and see if there is any objection. If the issue reporter does not reply in 30 days, close the issue.

If the problem can not be reproduced or requires more information, leave a comment for the issue reporter as soon as possible while the issue is fresh for the issue reporter.

Feature requests

New feature requests should be created via the etcd feature request template and in theory already have the `type/feature` label, however, if this is missing for an issue you determine to be a feature please add the label manually.

Test flakes

Test flakes
 are a specific type of bug that the etcd project tracks separately as these are a priority to address. These should be created via the test flake template and in theory already have the `type/flake` label, however, if this is missing for an issue you determine to be related to a flaking test please add the label manually.

Step 4 - Define the areas impacted

Adding an `area` label to an issue helps create visibility on which areas of the etcd project require attention and helps contributors find issues to work on relating to their particular skills or knowledge of the etcd codebase.

If an issue crosses multiple domains please add additional `area` labels to reflect that.

Below is a brief summary of the area labels in active use by the etcd project along with any notes on their use:

Label	Notes
area/external	Tracking label for issues raised that are external to etcd.
area/community	
area/raft	
area/clientv3	
area/performance	
area/security	
area/tls	
area/auth	
area/etcdctl	
area/etcdutl	
area/contrib	Not to be confused with `area/community` this label is specifically
used for issues relating to community-maintained scripts or files in the `contrib/` directory which aren't part of the core etcd project.

area/documentation	
area/tooling	Generally used in relation to the third party / external utilities or tools that are used in various stages of the etcd build, test, or release process, for example, tooling to create sboms.
area/testing	
area/robustness-testing	

Step 5 - Prioritise the issue

If an issue lacks a priority label it has not been formally prioritized yet.

Adding a `priority` label helps the etcd project understand what is important and should be worked on now, and conversely, what is not as important and is on the project backlog.

Priority label	What it means	Examples
`priority/critical-urgent`
Maintainers are responsible for making sure that these issues (in their area) are being actively worked oni.e., drop what you're doing. The stuff is burning. These should be fixed before the next release.	user-visible critical bugs in core features broken builds on tier1 supported platforms tests and critical security issues
`priority/important-soon`	Must be staffed and worked on either currently or very soonideally in time for the next release.	
`priority/important-longterm`	Important over the long term, but may not be currently staffed and/or may require multiple releases to complete.	
`priority/backlog`	General agreement that this is a nice-to-have, but no one's available to work on it anytime soon. Community contributions would be most welcome in the meantime, though it might take a while to get them reviewed if reviewers are fully occupied with higher-priority issuesfor example, immediately before a release.	
`priority/awaiting-more-evidence`
Possibly useful, but not yet enough support to actually get it done.	Mostly placeholders for potentially good ideas, so that they don't get completely forgotten, and can be referenced or deduped every time they come up

Step 6 - Support new contributors

As part of the `etcd` triage process once the `kind` and `area` have been determined, please consider if the issue would be suitable for a less experienced contributor. The `good first issue` label is a subset of the `help wanted` label, indicating that members have committed to providing extra assistance for new contributors. All `good first issue` items also have the `help wanted` label.

Help wanted

Items marked with the `help wanted` label need to ensure that they meet these criteria:

* **Low Barrier to Entry** - It should be easy for new contributors.

* **Clear** - The task is agreed upon and does not require further discussions in the community.

* **Goldilocks priority** - The priority
should not be so high that a core contributor should do it, but not too low that it isnt useful enough for a core contributor to spend time reviewing it, answering questions, helping get it into a release, etc.

Good first issue

Items marked with `good first issue` are intended for first-time contributors. It indicates that members will keep an eye out for these pull requests and shepherd it through our processes.

New contributors should not be left to find an approver, ping for reviews, decipher test commands, or identify that their build failed due to a flake. It is important to make new contributors feel welcome and valued. We should assure them that they will have an extra level of help with their first contribution.

After a contributor has successfully completed one or two `good first issue` items, they should be ready to move on to `help wanted` items.

* **No Barrier to Entry** - The task is something that a new contributor can tackle without advanced setup or domain knowledge.

*
Solution Explained - The recommended solution is clearly described in the issue.

* **Gives Examples** - Link to examples of similar implementations so new contributors have a reference guide for their changes.

* **Identifies Relevant Code** - The relevant code and tests to be changed should be linked in the issue.

* **Ready to Test** - There should be existing tests that can be modified, or existing test cases fit to be copied. If the area of code doesnt have tests, before labeling the issue, add a test fixture. This prep often makes a great help wanted task!

Step 7 - Follow up

Once initial triage has been completed, issues need to be re-evaluated over time to ensure they don't become stale incorrectly.

Track important issues

If an issue is at risk of being closed by the stale bot in the future, but is an important issue for the etcd project, then please apply the `stage/tracked` label and remove any `stale` labels that exist. This will ensure the project does not lose sight of the issue.

Close incomplete issues

Issues that lack enough information from the issue reporter should be closed if the issue reporter does not provide information in 30 days. Issues can always be re-opened at a later date if new information is provided.

Check for incomplete work

If an issue owned by a developer has no pull request created in 30 days, contact the issue owner and kindly ask about the status of their work, or to release ownership on the issue if needed.

Branch management

Guide

* New development occurs on the [main branch][main].
* The main branch should always have a green build!
* Backwards-compatible bug fixes should target the main branch and subsequently be ported to stable branches.
* Once the main branch is ready for release, it will be tagged and become the new stable branch.

The etcd team has adopted a *rolling release model* and supports two stable versions of etcd.

Main branch

The `main` branch is our development branch. All new features land here first.

To try new and experimental features, pull `main` and play with it. Note that `main` may not be stable because new features may introduce bugs.

Before the release of the next stable version, feature PRs will be frozen. A [release manager](./release.md#release-management) will be assigned to the major/minor version and will lead the etcd community in testing, bug-fix, and documentation of the release for one to two weeks.

Stable branches

All branches with
the prefix `release-` are considered _stable_ branches.

After every minor release (semver.org), we will have a new stable branch for that release, managed by a [patch release manager](./release.md#release-management). We will keep fixing the backward-compatible bugs for the latest two stable releases. A _patch_ release to each supported release branch, incorporating any bug fixes, will be once every two weeks, given any patches.

[main]: https://github.com/etcd-io/etcd/tree/main
PR management

Purpose

Speed up PR management.

The `etcd` PRs are listed at https://github.com/etcd-io/etcd/pulls
A PR can have various labels, milestones, reviewers, etc. The detailed list of labels can be found at https://github.com/kubernetes/kubernetes/labels

Following are a few example searches on PR for convenience:
* [Open PRS for milestone etcd-v3.6](https://github.com/etcd-io/etcd/pulls?utf8=%E2%9C%93&q=is%3Apr+is%3Aopen+milestone%3Aetcd-v3.6)
* [PRs under investigation](https://github.com/etcd-io/etcd/labels/Investigating)

Scope

These guidelines serve as a primary document for managing PRs in `etcd`. Everyone is welcome to help manage PRs but the work and responsibilities discussed in this document are created with `etcd` maintainers and active contributors in mind.

Ensure tests are run

The etcd project use Kubernetes Prow and GitHub Actions to run tests. To ensure all required tests run if a pull request is ready for testing and still has the `needs-ok-to-test`
label then please comment on the pull request `/ok-to-test`.

Handle inactive PRs
Poke PR owner if review comments are not addressed in 15 days. If the PR owner does not reply in 90 days, update the PR with a new commit if possible. If not, inactive PR should be closed after 180 days.

Poke reviewer if needed

Reviewers are responsive in a timely fashion, but considering everyone is busy, give them some time after requesting a review if a quick response is not provided. If the response is not provided in 10 days, feel free to contact them via adding a comment in the PR or sending an email or message on Slack.

Verify important labels are in place

Make sure that appropriate reviewers are added to the PR. Also, make sure that a milestone is identified. If any of these or other important labels are missing, add them. If a correct label cannot be decided, leave a comment for the maintainers to do so as needed.
Roadmap

etcd uses GitHub milestones to track all tasks in each major or minor release. The `roadmap.md` file only records the
most important tasks for each release. The list is based on the current maintainer capacity that may shift over time. Proposed milestones are what we think we can deliver with the people we have. If we have more support on the important
stuff, we could pick up more items from the backlog. Note that etcd will continue to mainly focus on technical debt over
the next few major or minor releases.

Each item has an assigned priority. Refer to [priority definitions](https://github.com/etcd-io/etcd/blob/main/Documentation/contributor-guide/triage_issues.md#step-5---prioritise-the-issue).

v3.6.0

For a full list of tasks in `v3.6.0`, please see [milestone etcd-v3.6](https://github.com/etcd-io/etcd/milestone/38).

| Title | Priority | Status | Note
|
|---|---|---|---

-|----------|
[Support downgrade](https://github.com/etcd-io/etcd/issues/11716)	priority/important-soon	In progress	etcd will support downgrade starting from 3.6.0. But it will also support offline downgrade from 3.5 to 3.4.
[StoreV2 deprecation](https://github.com/etcd-io/etcd/issues/12913)	priority/important-soon	In progress	This task will be covered in both 3.6 and 3.7.
[Release raft 3.6.0](https://github.com/etcd-io/raft/issues/89)	priority/important-soon	Not started	etcd 3.6.0 will depends on raft 3.6.0
[Release bbolt 1.4.0](https://github.com/etcd-io/bbolt/issues/553)	priority/important-soon	Not started	etcd 3.6.0 will depends on bbolt 1.4.0
[Support /livez and /readyz endpoints](https://github.com/etcd-io/etcd/issues/16007)	priority/important-longterm	In progress	It provides clearer APIs, and can also work around the stalled writes issue
[Bump gRPC](https://github.com/etcd-io/etcd/issues/16290)	priority/important-longterm	Completed	It isn't guaranteed to be resolved in 3.6, and might be postponed to 3.7 depending on the effort and risk.
[Deprecate grpc-gateway or bump it](https://github.com/etcd-io/etcd/issues/14499)	priority/important-longterm	Completed	It isn't guaranteed to be resolved in 3.6, and might be postponed to 3.7 depending on the effort and risk.
[bbolt: Add logger into bbolt](https://github.com/etcd-io/bbolt/issues/509)	priority/important-longterm	Completed	It's important to diagnose bbolt issues
[bbolt: Add surgery commands](https://github.com/etcd-io/bbolt/issues/370)	priority/important-longterm	Completed	Surgery commands are important for fixing corrupted db files
[Evaluate and (Gradulate or deprecate/remove) experimental features](https://github.com/etcd-io/etcd/issues/16292)	priority/backlog	Not started	This task will be covered in both 3.6 and 3.7.

v3.7.0

For a full list of tasks in `v3.7.0`, please see [milestone etcd-v3.7](https://github.com/etcd-io/etcd/milestone/39).

Title	Priority	Note
[StoreV2 deprecation](https://github.com/etcd-io/etcd/issues/12913)	P0	Finish the remaining tasks 3.7.
[Refactor lease: Lease might be revoked by mistake by old leader](https://github.com/etcd-io/etcd/issues/15247)	P1	to be investigated & discussed
[Integrate raft's new feature (async write) into etcd](https://github.com/etcd-io/etcd/issues/16291)	P1	It should improve the performance
[bbolt: Support customizing the bbolt rebalance threshold](https://github.com/etcd-io/bbolt/issues/422)	P2

| It may get rid of etcd's defragmentation. Both bbolt and etcd need to be changed. |
| [Evaluate and (graduate or deprecate/remove) experimental features](https://github.com/etcd-io/etcd/issues/16292) | P2 | Finish the remaining tasks 3.7. |

Backlog (future releases)

Title	Priority	Note
[Remove the dependency on grpc-go's experimental API](https://github.com/etcd-io/etcd/issues/15145)		
[Protobuf: cleanup both golang/protobuf and gogo/protobuf](https://github.com/etcd-io/etcd/issues/14533)		
[Proposals should include a merkle root](https://github.com/etcd-io/etcd/issues/13839)		
[Add Distributed Tracing using OpenTelemetry](https://github.com/etcd-io/etcd/issues/12460)		
[Support CA rotation](https://github.com/etcd-io/etcd/issues/11555)		
[bbolt: Migrate all commands to cobra style commands](https://github.com/etcd-io/bbolt/issues/472)		
[raft: enhance the configuration change validation](https://github.com/etcd-io/raft/issues/80)		

Release

The guide talks about how to release a new version of etcd.

The procedure includes some manual steps for sanity checking, but it can probably be further scripted. Please keep this document up-to-date if making changes to the release process.

Release management

The following pool of release candidates manages the release of each etcd major/minor version as well as manages patches to each stable release branch. They are responsible for communicating the timelines and status of each release and for ensuring the stability of the release branch.

- Benjamin Wang [@ahrtr](https://github.com/ahrtr)
- James Blair [@jmhbnz](https://github.com/jmhbnz)
- Marek Siarkowicz [@serathius](https://github.com/serathius)
- Sahdev Zala [@spzala](https://github.com/spzala)
- Wenjia Zhang [@wenjiaswe](https://github.com/wenjiaswe)

All release version numbers follow the format of [semantic versioning 2.0.0](http://semver.org/).

Major, minor version release, or its pre-release

- Ensure the relevant [milestone](https://github.com/etcd-io/etcd/milestones) on GitHub is complete. All referenced issues should be closed or moved elsewhere.
- Ensure the latest [upgrade documentation](https://etcd.io/docs/next/upgrades) is available.
- Bump [hardcoded MinClusterVerion in the repository](https://github.com/etcd-io/etcd/blob/v3.4.15/version/version.go#L29), if necessary.

- Add feature capability maps for the new version, if necessary.

Patch version release

- To request a backport, developers submit cherry-pick PRs targeting the release branch. The commits should not include merge commits. The commits should be restricted to bug fixes and security patches.
- The cherrypick PRs should target the appropriate release branch (`base:release-<major>-<minor>`). The k8s infra cherry pick robot `/cherrypick <branch>` PR chatops command may be used to automatically generate cherrypick PRs.
- The release patch manager reviews the cherrypick PRs. Please discuss carefully what is backported to the patch release. Each patch release should be strictly better than its predecessor.
- The release patch manager will cherry-pick these commits starting from the oldest one into stable branch.

Write a release note

- Write an introduction for the new release. For example, what major bug we fix, what new features we introduce, or what performance improvement we make.
- Put `[GH XXXX]` at the head of the change line to reference the Pull Request that introduces the change. Moreover, add a link on it to jump to the Pull Request.
- Find PRs with the `release-note` label and explain them in the `NEWS` file, as a straightforward summary of changes for end-users.

Patch release criteria

The etcd project aims to release a new patch version if any of the following conditions are met:

- Fixed one or more major CVEs (>=7.5).
- Fixed one or more critical bugs.
- Fixed three or more major bugs.
- Fixed five or more minor bugs.

Release guide

Prerequisites

There are some prerequisites, which should be done before the release process. These are one-time operations, which don't need to be executed before releasing each version.

1. Generate a GPG key and add it to your GitHub account. Refer to the links on [settings](https://github.com/settings/keys).
2. Ensure you have a Linux machine, on which the git, Golang, and docker have been installed.
   - Ensure the Golang version matches the version defined in `.go-version` file.
   - Ensure non-privileged users can run docker commands, refer to the [Linux postinstall](https://docs.docker.com/engine/install/linux-postinstall/).
   - Ensure there is at least 5GB of free space on your Linux machine.
3. Install gsutil, refer to [gsutil_install](https://cloud.google.com/storage/docs/gsutil_install). When asked about cloud project to use, pick `etcd-development`.
4. Authenticate the image registry, refer to [Authentication methods](https://cloud.google.com/container-

registry/docs/advanced-authentication).
 - `gcloud
 auth login`
 - `gcloud auth configure-docker`
5. Install gh, refer to [GitHub's documentation](https://github.com/cli/cli#installation). Ensure that running
 `gh auth login` succeeds for the GitHub account you use to contribute to etcd,
 and that `gh auth status` has a clean exit and doesn't show any issues.

Release steps

1. Raise an issue to publish the release plan, e.g. [issues/17350](https://github.com/etcd-io/etcd/issues/17350).
2. Raise a `kubernetes/org` pull request to temporarily elevate permissions for the GitHub release team.
3. Once permissions are elevated, temporarily relax [branch protections](https://github.com/etcd-io/etcd/settings/branches) to allow pushing changes directly to `release-*` branches in GitHub.
4. Verify you can pass the authentication to the image registries,
 - `docker login gcr.io`
 - `docker login quay.io`
  - If the release person doesn't have access to 1password, one of the owners (@ahrtr, @ivanvc, @jmhbnz, @serathius) needs
 to share the password with them per [this guide](https://support.1password.com/share-items/). See rough steps below,
    - [Sign in](https://team-etcd.1password.com/home) to your account on 1password.com.
    - Click `Your Vault Items` on the right side.
    - Select `Password of quay.io`.
    - Click `Share` on the top right, and set expiration as `1 hour` and only available to the release person using his/her email.
    - Click `Copy Link` then send the link to the release person via slack or email.
5. Clone the etcd repository and checkout the target branch,
 - `git clone --branch release-3.X git@github.com:etcd-io/etcd.git`
6. Run the release script under the repository's root directory, replacing `${VERSION}` with a value without the `v` prefix, i.e. `3.5.13`.
 - `DRY_RUN=false ./scripts/release.sh ${VERSION}`
 - **NOTE:** When doing a pre-release (i.e., a version from the main branch, 3.6.0-alpha.2), you will need to explicitly set the branch to main:

  ```
  DRY_RUN=false BRANCH=main ./scripts/release.sh ${VERSION}
  ```

  It generates all release binaries under the directory `/tmp/etcd-release-${VERSION}/etcd/release/` and images. Binaries are pushed to the Google Cloud bucket
 under project `etcd-development`, and images are pushed to `quay.io` and `gcr.io`.
7. Publish the release page on GitHub
 - Open the **draft** release URL shown by the release script
 - Click the pen button at the top right to edit the release
 - Review that it looks correct, reviewing that the bottom checkboxes are checked depending on the
  release version (v3.4 no checkboxes, v3.5 has the set as latest release checkbox checked,
  v3.6 has the set as pre-release checkbox checked)

  - Then, publish the release
8. Announce to the etcd-dev googlegroup

  Follow the format of previous release emails sent to etcd-dev@googlegroups.com, see an example below. After sending out the email, ask one of the mailing list maintainers to approve the
 email from the pending list. Additionally, label the release email as `Release`.

```text
Hello,

etcd v3.4.30 is now public!

https://github.com/etcd-io/etcd/releases/tag/v3.4.30

Thanks to everyone who contributed to the release!

etcd team
```

9. Update the changelog to reflect the correct release date.
10. Paste the release link to the issue raised in Step 1 and close the issue.
11. Restore standard branch protection settings and raise a follow-up `kubernetes/org` pull request to return to least privilege permissions.
12. Crease a new stable branch through `git push origin release-${VERSION_MAJOR}.${VERSION_MINOR}` if this is a new major or minor stable release.
13. Re-generate a new password for quay.io if needed (e.g. shared to a contributor who isn't in the release team, and we should rotate the password at least once every 3 months).

Release known issues

1. Timeouts pushing binaries - If binaries fail to fully upload to Google Cloud storage, the script must be re-run
 using the same command. Any artifacts that are already pushed will be overwritten to ensure they are correct. The storage bucket does not use object versioning so incorrect files cannot remain.

2. Timeouts pushing images - It is rare, although possible for connection timeouts to occur when publishing etcd release images to `quay.io` or `gcr.io`. If this occurs, it is known to be safe to rerun the release script command appending the `--no-upload` flag, and image uploads will gracefully resume.

3. GPG vs SSH signing - The release scripts assume that git tags will be signed with a GPG key. Since 2022 GitHub has supported [signing commits and tags using ssh](https://github.blog/changelog/2022-08-23-ssh-commit-verification-now-supported). Until further release script updates are completed you will need to disable this feature in your `~/.gitconfig` and revert to signing via GPG to perform etcd releases.
Golang modules

The etcd project (since version 3.5) is organized into multiple
[golang modules](https://golang.org/ref/mod) hosted in a [single repository](https://golang.org/ref/mod#vcs-dir).



There are the following modules:

- **go.etcd.io/etcd/api/v3** - contains API definitions
(like protos & proto-generated libraries) that defines communication protocol
between etcd clients and servers.

- **go.etcd.io/etcd/pkg/v3** - a collection of utility packages used by etcd
without being specific to etcd itself. A package belongs here
only if it could possibly be moved out into its own repository in the future.
Please avoid adding here code that has a lot of dependencies on its own, as
they automatically become dependencies of the client library
(that we want to keep lightweight).

- **go.etcd.io/etcd/client/v3** - client library used to contact etcd over
the network (grpc). Recommended for all new usage of etcd.

- **go.etcd.io/raft/v3**
- implementation of distributed consensus
protocol. Should have no etcd specific code. Hosted in a separate repository:
https://github.com/etcd-io/raft.

- **go.etcd.io/etcd/server/v3** - etcd implementation.
The code in this package is internal to etcd and should not be consumed
by external projects. The package layout and API can change within the minor versions.

- **go.etcd.io/etcd/etcdctl/v3** - a command line tool to access and manage etcd.

- **go.etcd.io/etcd/tests/v3** - a module that contains all integration tests of etcd.
  Notice: All unit tests (fast and not requiring cross-module dependencies)
  should be kept in the local modules of the code under the test.

- **go.etcd.io/bbolt** - implementation of persistent b-tree.
  Hosted in a separate repository: https://github.com/etcd-io/bbolt.

Operations

1. All etcd modules should be released in the same versions, e.g.
  `go.etcd.io/etcd/client/v3@v3.5.10` must depend on `go.etcd.io/etcd/api/v3@v3.5.10`.

   The consistent updating of versions can be performed using:
  ```shell script
  % DRY_RUN=false TARGET_VERSION="v3.5.10" ./scripts/release_mod.sh update_versions
  ```
2. The released modules should be tagged according to https://golang.org/ref/mod#vcs-version rules,
  i.e. each module should get its own tag.
  The tagging can be performed using:

```shell script
% DRY_RUN=false REMOTE_REPO="origin" ./scripts/release_mod.sh push_mod_tags
```

3. All etcd modules should depend on the same versions of underlying dependencies.
   This can be verified using:
   ```shell script
   % PASSES="dep" ./test.sh
   ```

4. The go.mod files must not contain dependencies not being used and must
   conform to `go mod tidy` format.
   This is being verified by:
   ```
   % PASSES="mod_tidy" ./test.sh
   ```

5. To trigger actions across all modules (e.g. auto-format all files), please
   use/expand the following script:
   ```shell script
   % ./scripts/fix.sh
   ```

###
Future

As a North Star, we would like to evaluate etcd modules towards the following model:



This assumes:
- Splitting etcdmigrate/etcdadm out of etcdctl binary.
  Thanks to this etcdctl would become clearly a command-line wrapper
  around network client API,
  while etcdmigrate/etcdadm would support direct physical operations on the
  etcd storage files.
- Splitting etcd-proxy out of ./etcd binary, as it contains more experimental code
  so carries additional risk & dependencies.
- Deprecation of support for v2 protocol.

Reporting bugs

If any part of the etcd project has bugs or documentation mistakes, please let us know by [opening an issue][etcd-issue]. We treat bugs and mistakes very seriously and believe no issue is too small. Before creating a bug report, please check that an issue reporting the same problem does not already exist.

To make the bug report accurate and easy to understand, please try to create bug reports that are:

- Specific. Include as many details as possible: which version, what environment, what configuration, etc. If the bug

is related to running the etcd server, please attach the etcd log (the starting log with the etcd configuration is especially important).

- Reproducible. Include the steps to reproduce the problem. We understand some issues might be hard to reproduce, please include the steps that might lead to the problem. If possible, please attach the affected etcd data dir and stack trace to the bug report.

- Isolated. Please try to isolate and reproduce the bug with
 minimum dependencies. It would significantly slow down the speed to fix a bug if too many dependencies are involved in a bug report. Debugging external systems that rely on etcd is out of scope, but we are happy to provide guidance in the right direction or help with using etcd itself.

- Unique. Do not duplicate existing bug reports.

- Scoped. One bug per report. Do not follow up with another bug inside one report.

It may be worthwhile to read [Elika Etemads article on filing good bug reports][filing-good-bugs] before creating a bug report.

We might ask for further information to locate a bug. A duplicated bug report will be closed.

Frequently asked questions

How to get a stack trace

``` bash
$ kill -QUIT $PID
```

How to get the etcd version

``` bash
$ etcd --version
```

How to get etcd configuration and log when it runs as systemd service etcd2.service

``` bash
$ sudo systemctl cat etcd2
$ sudo journalctl -u etcd2
```

Due to an upstream systemd bug, journald
 may miss the last few log lines when its processes exit. If journalctl says etcd stopped without a fatal or panic message, try `sudo journalctl -f -t etcd2` to get the full log.

[etcd-issue]: https://github.com/etcd-io/etcd/issues/new
[filing-good-bugs]: http://fantasai.inkedblade.net/style/talks/filing-good-bugs/

Community membership

This doc outlines the various responsibilities of contributor roles in etcd.

Role	Responsibilities	Requirements	Defined by
Member	Active contributor in the community	Sponsored by 2 reviewers and multiple contributions	etcd GitHub org member
Reviewer	Review contributions from other members	History of review and authorship	[OWNERS] file reviewer entry
Maintainer	Set direction and priorities for the project	Demonstrated responsibility and excellent technical judgement	[OWNERS] file approver entry

New contributors

New contributors should be welcomed to the community by existing members,
helped with
 PR workflow, and directed to relevant documentation and
communication channels.

Established community members

Established community members are expected to demonstrate their adherence to the
principles in this document, familiarity with project organization, roles,
policies, procedures, conventions, etc., and technical and/or writing ability.
Role-specific expectations, responsibilities, and requirements are enumerated
below.

Member

Members are continuously active contributors to the community. They can have
issues and PRs assigned to them. Members are expected to remain active
contributors to the community.

Defined by: Member of the etcd GitHub organization.

Requirements

- Enabled [two-factor authentication] on their GitHub account
- Have made multiple contributions to the project or community. Contribution may include, but is not limited to:
  - Authoring or reviewing PRs on GitHub. At least one PR must be **merged**.
  - Filing or commenting on issues on
 GitHub
  - Contributing to community discussions (e.g. meetings, Slack, email discussion
    forums, Stack Overflow)
- Subscribed to [etcd-dev@googlegroups.com](https://groups.google.com/g/etcd-dev)

- Have read the [contributor guide]
- Sponsored by two active maintainers or reviewers.
  - Sponsors must be from multiple member companies to demonstrate integration across the community.
  - With no objections from other maintainers
- Open a [membership nomination] issue against the `kubernetes/org` repo
  - Ensure your sponsors are @mentioned on the issue
  - Make sure that the list of contributions included is representative of your work on the project.
- Members can be removed by a supermajority of the maintainers or can resign by notifying the maintainers.

Responsibilities and privileges

- Responsive to issues and PRs assigned to them
- Granted "triage access" to etcd project
- Active owner of code they have contributed (unless ownership is explicitly transferred)
  - Code is well-tested
  - Tests consistently pass
  - Addresses bugs or issues discovered after code is accepted

Note: Members who frequently contribute code are expected to proactively perform code reviews and work towards becoming a *reviewer*.

Reviewers

Reviewers are contributors who have demonstrated greater skill in reviewing the code from other contributors. They are knowledgeable about both the codebase and software engineering principles. Their LGTM counts towards merging a code change into the project. A reviewer is generally on the ladder towards maintainership.

Defined by: *reviewers* entry in the [OWNERS] file.

Requirements

- member for at least 3 months.
- Primary reviewer for at least 5 PRs to the codebase.
- Reviewed or contributed at least 20 substantial PRs to the codebase.
- Knowledgeable about the codebase.
- Sponsored by two active maintainers.
  - Sponsors must be from multiple member companies to demonstrate integration across the community.
  - With no objections from other maintainers
- Reviewers can be removed by a supermajority of the maintainers or can resign by notifying the maintainers.

Responsibilities and privileges

- Code reviewer status may be a precondition to accepting large code contributions

- Responsible for project quality control via code reviews
  - Focus on code quality and correctness, including testing and factoring
  - May also review for more holistic issues, but not a requirement
- Expected to be responsive to review requests
- Assigned PRs to review related to area of expertise
- Assigned test bugs related to area of expertise
- Granted "triage access" to etcd project

Maintainers

Maintainers are first and foremost contributors who have shown they
are committed to the long-term success of a project. Maintainership is about building
trust with the current maintainers and being a person that they can
depend on to make decisions in the best interest of the project in a consistent
manner.

Defined by: *approvers* entry in the [OWNERS] file.

Requirements

- Deep understanding of the technical goals and direction of the project
- Deep understanding of the technical domain of the project
- Sustained contributions to design and direction by doing all of:
  - Authoring and reviewing proposals
  - Initiating, contributing, and resolving discussions (emails, GitHub issues, meetings)
  - Identifying subtle or complex issues in the designs and implementation of PRs
- Directly contributed to the project through implementation and/or review
- Sponsored by two active maintainers and elected by supermajority
  - Sponsors must be from multiple member companies to demonstrate integration across the community.
- To become a maintainer send an email with your candidacy to etcd-maintainers-private@googlegroups.com
  - Ensure your sponsors are @mentioned in the email
  - Include a list of contributions representative of your work on the project.
  -
Existing maintainers vote will privately and respond to the email with either acceptance or feedback for suggested improvement.
- With your membership approved you are expected to:
- Open a PR and add an entry to the [OWNERS] file
- Subscribe to etcd-maintainers@googlegroups.com and etcd-maintainers-private@googlegroups.com
- Request to join [etcd-maintainer teams of etcd organization of GitHub](https://github.com/orgs/etcd-io/teams/maintainers-etcd)
- Request to join the private slack channel for etcd maintainers on [kubernetes slack](http://slack.kubernetes.io/)
- Request access to etcd-development GCP project where we publish releases
- Request access to passwords shared between maintainers

Responsibilities and privileges

- Make and approve technical design decisions
- Set technical direction and priorities

- Define milestones and releases
- Mentor and guide reviewers, and contributors to the project.
- Participate when called upon in the [security disclosure and
 release process]
- Ensure the continued health of the project
  - Adequate test coverage to confidently release
  - Tests are passing reliably (i.e. not flaky) and are fixed when they fail
- Ensure a healthy process for discussion and decision-making is in place.
- Work with other maintainers to maintain the project's overall health and success holistically

Retiring

Life priorities, interests, and passions can change. Maintainers can retire and
move to [emeritus maintainers]. If a maintainer needs to step down, they should
inform other maintainers and, if possible, help find someone to pick up the related
work. At the very least, ensure the related work can be continued. Afterward,
they can remove themselves from the list of existing maintainers.

If a maintainer has not been performing their duties for 12 months,
they can be removed by other maintainers. In that case, the inactive maintainer will
be first notified via an email. If the situation doesn't improve, they will be
removed.
 If an emeritus maintainer wants to regain an active role, they can do
so by renewing their contributions. Active maintainers should welcome such a move.
Retiring other maintainers or regaining the status should require the approval
of at least two active maintainers.

Acknowledgements

Contributor roles and responsibilities were written based on [Kubernetes community membership]

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[Kubernetes community membership]: https://github.com/kubernetes/community/blob/master/community-membership.md
[emeritus maintainers]: /README.md#etcd-emeritus-maintainers
[security disclosure and release process]: /security/README.md
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Logging Conventions

etcd uses the [zap][zap] library for logging application output categorized into *levels*. A log message's level is determined according to these conventions:

* Debug: Everything is still fine, but even common operations may be logged, and less helpful but more quantity of notices. Usually not used in production.
 * Examples:
  * Send a normal message to a remote peer
  * Write a log entry to disk

* Info: Normal, working log information, everything is fine, but helpful notices for auditing or common operations. Should rather not be logged more frequently than once per a few seconds in a normal server's operation.
 * Examples:
  * Startup configuration
  * Start to do a snapshot

* Warning: (Hopefully) Temporary conditions that may cause errors, but may work fine. A replica disappearing (that may reconnect) is a warning.
 * Examples:
  * Failure to send a raft message to a remote peer
  * Failure to receive heartbeat message within the configured election
 timeout

* Error: Data has been lost, a request has failed for a bad reason, or a required resource has been lost.
 * Examples:
  * Failure to allocate disk space for WAL

* Panic: Unrecoverable or unexpected error situation that requires stopping execution.
 * Examples:
  * Failure to create the database

* Fatal: Unrecoverable or unexpected error situation that requires immediate exit. Mostly used in the test.
 * Examples:
  * Failure to find the data directory
  * Failure to run a test function

[zap]: https://github.com/uber-go/zap
Dependency management

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 - [Indirect dependencies](#indirect-dependencies)
 - [Known incompatible dependency updates](#known-incompatible-dependency-updates)
   - [arduino/setup-protoc](#arduinosetup-protoc)
 - [Rotation worksheet](#rotation-worksheet)
- **[Stable branches](#stable-branches)**
- **[Golang versions](#golang-versions)**
- **[Core dependencies mappings](#core-dependencies-mappings)**

Main branch

The dependabot is enabled & [configured](https://github.com/etcd-io/etcd/blob/main/.github/dependabot.yml) to manage dependencies for etcd `main` branch. But dependabot doesn't work well for multi-module repository like `etcd`,
see [dependabot-core/issues/6678](https://github.com/dependabot/dependabot-core/issues/6678).
Usually, human intervention is required
 each time when dependabot automatically opens some PRs to bump dependencies.
Please see the guidance below.

Dependencies used in workflows

The PRs that automatically bump dependencies (see examples below) used in workflows are fine and can be approved & merged directly as long as all checks are successful.

- [build(deps): bump github/codeql-action from 2.2.11 to 2.2.12](https://github.com/etcd-io/etcd/pull/15736)
- [build(deps): bump actions/checkout from 3.5.0 to 3.5.2](https://github.com/etcd-io/etcd/pull/15735)
- [build(deps): bump ossf/scorecard-action from 2.1.2 to 2.1.3](https://github.com/etcd-io/etcd/pull/15607)

Bumping order

When multiple etcd modules depend on the same package, please bump the package version for all the modules in the correct order. The rule is simple:
if module A depends on module B, then bump the dependency for module B before module A. If the two modules do not depend on each other, then
it doesn't matter to bump which module first. For
 example, multiple modules depend on `github.com/spf13/cobra`, so we need to bump the dependency
in the following order,

- go.etcd.io/etcd/pkg/v3

- go.etcd.io/etcd/server/v3
- go.etcd.io/etcd/etcdctl/v3
- go.etcd.io/etcd/etcdutl/v3
- go.etcd.io/etcd/tests/v3
- go.etcd.io/etcd/v3
- go.etcd.io/etcd/tools/v3

For more details about etcd Golang modules, please check <https://etcd.io/docs/next/dev-internal/modules>

Note the module `go.etcd.io/etcd/tools/v3` doesn't depend on any other modules, nor by any other modules, so it doesn't matter when to bump dependencies for it.

Steps to bump a dependency

Use the `github.com/spf13/cobra` as an example, follow the steps below to bump it from 1.6.1 to 1.7.0 for module `go.etcd.io/etcd/etcdctl/v3`,

```bash
cd ${ETCD_ROOT_DIR}/etcdctl
go get github.com/spf13/cobra@v1.7.0
go mod tidy
cd ..
./scripts/fix.sh
```

Execute the same steps for all other modules. When you finish bumping the dependency for all modules, then commit the change,

```bash
git
 add .
git commit --signoff -m "dependency: bump github.com/spf13/cobra from 1.6.1 to 1.7.0"
```

Please close the related PRs which were automatically opened by dependabot.

When you bump multiple dependencies in one PR, it's recommended to create a separate commit for each dependency. But it isn't a must; for example,
you can get all dependencies bumping for the module `go.etcd.io/etcd/tools/v3` included in one commit.

Troubleshooting

In an event of bumping the version of protoc, protoc plugins or grpc-gateway, it might change `*.proto` file which can result in the following error:

```bash
[0;31mFAIL: 'genproto' FAILED at Wed Jul 31 07:09:08 UTC 2024
make: *** [Makefile:134: verify-genproto] Error 255
```

To fix the above error, run the following script from the root of etcd repository:

```bash
./scripts/genproto.sh
```

Indirect dependencies

Usually, we don't bump a dependency if all modules just indirectly depend on it, such as `github.com/go-logr/logr`.

If
 an indirect dependency (e.g. `D1`) causes any CVE or bugs that affect etcd, usually the module (e.g. `M1`, not part of etcd, but used by etcd)
which depends on it should bump the dependency (`D1`), and then etcd just needs to bump `M1`. However, if the module (`M1`) somehow doesn't
bump the problematic dependency, then etcd can still bump it (`D1`) directly following the same steps above. But as a long-term solution, etcd should
try to remove the dependency on such module (`M1`) that lack maintenance.

For mixed cases, in which some modules directly while others indirectly depend on a dependency, we have multiple options,

- Bump the dependency for all modules, no matter it's direct or indirect dependency.
- Bump the dependency only for modules that directly depend on it.

We should try to follow the first way, and temporarily fall back to the second one if we run into any issue on the first way. Eventually we
should fix the issue and ensure all modules depend on the same version of the
 dependency.

Known incompatible dependency updates

arduino/setup-protoc

Please refer to [build(deps): bump arduino/setup-protoc from 1.3.0 to 2.0.0](https://github.com/etcd-io/etcd/pull/16016)

Rotation worksheet

The dependabot scheduling interval is weekly; it means dependabot will automatically raise a bunch of PRs per week.
Usually, human intervention is required each time. We have a [rotation worksheet](https://docs.google.com/spreadsheets/d/1jodHIO7Dk2VWTs1IRnfMFaRktS9IH8XRyifOnPdSY8I/edit#gid=1394774387),
and everyone is welcome to participate; you just need to register your name in the worksheet.

Stable branches

Usually, we don't proactively bump dependencies for stable releases unless there are any CVEs or bugs that affect etcd.

If we have to do it, then follow the same guidance above. Note that there is no `./scripts/fix.sh` in release-3.4, so no need to
execute it for 3.4.

Golang versions

The etcd project aims to maintain a development branch that
is on the latest [Go version](https://go.dev/dl), ideally, this will align with the Go version in use for Kubernetes project development. For an example of how to update etcd to a new minor release of Go refer to issue <https://github.com/etcd-io/etcd/issues/16393> and the linked pull requests.

Suggested steps for performing a minor version upgrade for the etcd development branch:

1. Carefully review new Go version release notes and potentially related blog posts for any deprecations, performance impacts, or other considerations.
2. Create a GitHub issue to signal intent to upgrade and invite discussion, for example, <https://github.com/etcd-io/etcd/issues/16393>.
3. Complete the upgrade locally in your development environment by editing `.go-version` and running `make fix`.
4. Run performance benchmarks locally to compare before and after.
5. Raise a pull request for the changes, for example, <https://github.com/etcd-io/etcd/pull/16394>.

Stable etcd release branches will be maintained
to stay on the latest patch release of a supported Go version. Upgrading minor versions will be completed before the minor version in use currently is no longer supported. Refer to the [Go release
policy](https://go.dev/doc/devel/release).

For an example of how to update etcd to a new patch release of Go refer to issue <https://github.com/etcd-io/etcd/issues/16343> and the linked pull requests.

References:

- <https://github.com/kubernetes/sig-release/blob/master/release-engineering/handbooks/go.md>

Core dependencies mappings

[bbolt](https://github.com/etcd-io/bbolt) and [raft](https://github.com/etcd-io/raft) are two core dependencies of etcd.

Both etcd 3.4.x and 3.5.x depend on bbolt 1.3.x, and etcd 3.6.x (`main` branch) depends on bbolt 1.4.x.

raft is included in the etcd repository for release-3.4 and release-3.5 branches, so etcd 3.4.x and 3.5.x do not depend on any
external raft module. We moved raft into [a separate repository](https://github.com/etcd-io/raft) starting

from 3.6 (`main` branch), and the first raft
release will be v3.6.0, so etcd 3.6.x will depend on raft 3.6.x.

Please see the table below:

etcd versions	bbolt versions	raft versions
3.4.x	v1.3.x	N/A
3.5.x	v1.3.x	N/A
3.6.x	v1.4.x	v3.6.x

1.147 x-exp 0.0.0-20250531010427-b6e5de432a8b

1.147.1 Available under license :

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1.148 go.etcd.io/etcd/api/v3 3.6.0

1.148.1 Available under license :

Features

This document provides an overview of etcd features and general development guidelines for adding and deprecating them. The project maintainers can override these guidelines per the need of the project following the project governance.

Overview

The etcd features fall into three stages, experimental, stable, and unsafe.

Experimental

Any new feature is usually added as an experimental feature. An experimental feature is characterized as below:
- Might be buggy due to a lack of user testing. Enabling the feature may not work as expected.
- Disabled by default when added initially.
- Support for such a feature may be dropped at any time without notice
  - Feature-related issues may be given lower priorities.
  - It can be removed in the next minor or major release without following the feature deprecation policy unless it graduates to a stable future.

Stable

A stable feature is characterized as below:
- Supported as part of the supported releases of etcd.
-
May be enabled by default.
- Discontinuation of support must follow the feature deprecation policy.

Unsafe

Unsafe features are rare and listed under the `Unsafe feature:` section in the etcd usage documentation. By default, they are disabled. They should be used with caution following documentation. An unsafe feature can be removed in the next minor or major release without following the feature deprecation policy.

Development Guidelines

Adding a new feature

Any new enhancements to the etcd are typically added as an experimental feature. The general development requirements are listed below. They can be somewhat flexible depending on the scope of the feature and review discussions and will evolve over time.

- Open an issue
  - It must provide a clear need for the proposed feature.
  - It should list development work items as checkboxes. There must be one work item towards future graduation to a stable future.
  - Label the issue with `type/feature` and `experimental`.
  - Keep the issue open for tracking purposes until a decision is made on graduation.
- Open a Pull Request (PR)
  - Provide unit tests. Integration tests are also recommended as possible.
  - Provide robust e2e test coverage. If the feature being added is complicated or quickly needed, maintainers can decide to go with e2e tests for basic coverage initially and have robust coverage added at a later time before the feature graduation to the stable feature.
  - Provide logs for proper debugging.
  - Provide metrics and benchmarks as needed.
  - The Feature should be disabled by default.
  - Any configuration flags related to the implementation of the feature must be prefixed with `experimental` e.g. `--experimental-feature-name`.
  - Add a CHANGELOG entry.
- At least two maintainers must approve feature requirements and related code changes.

Graduating an Experimental feature to Stable

It is important that experimental features don't get stuck in that stage.
They should be revisited and moved to the stable stage following the graduation steps as described here.

Locate graduation candidate

Decide if an experimental feature is ready for graduation to the stable stage.

- Find the issue that was used to enable the experimental feature initially. One way to find such issues is to search for issues with `type/feature` and `experimental` labels.
- Fix any known open issues against the feature.
- Make sure the feature was enabled for at least one previous release. Check the PR(s) reference from the issue to see when the feature-related code changes were merged.

Provide implementation

If an experimental feature is found ready for graduation to the stable stage, open a Pull Request (PR) with the following changes.

- Add robust e2e tests if not already provided.
- Add a new stable feature flag identical to the experimental feature flag but without the `--experimental` prefix.
- Deprecate the experimental feature following the [feature deprecation
 policy](#Deprecating-a-feature).
- Implementation must ensure that both the graduated and deprecated experimental feature flags work as expected. Note that both these flags will co-exist for the timeframe described in the feature deprecation policy.
- Enable the graduated feature by default if needed.

At least two maintainers must approve the work. Patch releases should not be considered for graduation.

Deprecating a feature

Experimental
An experimental feature deprecates when it graduates to the stable stage.
- Add a deprecation message in the documentation of the experimental feature with a recommendation to use a related stable feature. e.g. `DEPRECATED. Use <feature-name> instead.`
- Add a `deprecated` label in the issue that was initially used to enable the experimental feature.

Stable
As the project evolves, a stable feature may sometimes need to be deprecated and removed. Such a situation should be handled using the steps below:
- Create an issue for tracking
 purposes.
- Add a deprecation message in the feature usage documentation before a planned release for feature deprecation. e.g. `To be deprecated in <release>.`. If a new feature replaces the `To be deprecated` feature, then also provide a message saying so. e.g. `Use <feature-name> instead.`.
- Deprecate the feature in the planned release with a message as part of the feature usage documentation. e.g. `DEPRECATED`. If a new feature replaces the deprecated feature, then also provide a message saying so. e.g. `DEPRECATED. Use <feature-name> instead.`.
- Add a `deprecated` label in the related issue.

Remove the deprecated feature in the following release. Close any related issue(s). At least two maintainers must approve the work. Patch releases should not be considered for deprecation.
Set up the local cluster

For testing and development deployments, the quickest and easiest way is to configure a local cluster. For a production deployment, refer to the [clustering][clustering] section.

Local standalone cluster

Starting a cluster

Run the following to deploy an etcd cluster as a standalone cluster:

```
$ ./etcd
...
```

If the `etcd` binary is not present in the current working directory, it might be located either at `$GOPATH/bin/etcd` or at `/usr/local/bin/etcd`. Run the command appropriately.

The running etcd member listens on `localhost:2379` for client requests.

Interacting with the cluster

Use `etcdctl` to interact with the running cluster:

1. Store an example key-value pair in the cluster:

```
$ ./etcdctl put foo bar
OK
```

If OK is printed, storing the key-value pair is successful.

2. Retrieve the value of `foo`:

```
$ ./etcdctl get foo
bar
```

If `bar` is returned, interaction with the etcd cluster is working as expected.

Local multi-member cluster

Starting a cluster

A `Procfile` at the base of the etcd git repository is provided to easily configure a local multi-member cluster. To start a multi-member cluster, navigate to the root of the etcd source tree and perform the following:

1. Install `goreman` to control Procfile-based applications:

```
$ go install github.com/mattn/goreman@latest
```

The installation will place executables in the $GOPATH/bin. If $GOPATH environment variable is not set, the tool will be installed into the $HOME/go/bin. Make sure that $PATH is set accordingly in your environment.

2. Start a cluster with `goreman` using etcd's stock Procfile:

```
$ goreman -f Procfile start
```

```

The members start running. They listen on `localhost:2379`, `localhost:22379`, and `localhost:32379` respectively for client requests.

### Interacting with the cluster

Use `etcdctl` to interact with the running cluster:

1. Print
the list of members:

```
$ etcdctl --write-out=table --endpoints=localhost:2379 member list
```

The list of etcd members is displayed as follows:

```
+------------------+---------+--------+------------------------+------------------------+
|        ID        | STATUS  |  NAME  |       PEER ADDRS       |      CLIENT ADDRS      |
+------------------+---------+--------+------------------------+------------------------+
| 8211f1d0f64f3269 | started | infra1 | http://127.0.0.1:2380  | http://127.0.0.1:2379  |
| 91bc3c398fb3c146 | started | infra2 | http://127.0.0.1:22380 | http://127.0.0.1:22379 |
| fd422379fda50e48 | started | infra3 | http://127.0.0.1:32380 | http://127.0.0.1:32379 |
+------------------+---------+--------+------------------------+------------------------+
```

2. Store an example key-value pair in the cluster:

```
$ etcdctl put foo bar
OK
```

If OK is printed, storing the key-value pair is successful.

###
Testing fault tolerance

To exercise etcd's fault tolerance, kill a member and attempt to retrieve the key.

1. Identify the process name of the member to be stopped.

The `Procfile` lists the properties of the multi-member cluster. For example, consider the member with the process name, `etcd2`.

2. Stop the member:
```

```
# kill etcd2
$ goreman run stop etcd2
```

3. Store a key:

```
$ etcdctl put key hello
OK
```

4. Retrieve the key that is stored in the previous step:

```
$ etcdctl get key
hello
```

5. Retrieve a key from the stopped member:

```
$ etcdctl --endpoints=localhost:22379 get key
```

The command should display an error caused by connection failure:

```
2017/06/18 23:07:35 grpc: Conn.resetTransport failed to create client transport: connection error: desc = "transport: dial tcp 127.0.0.1:22379: getsockopt: connection refused"; Reconnecting to "localhost:22379"
Error:  grpc:
timed out trying to connect
```

6. Restart the stopped member:

```
$ goreman run restart etcd2
```

7. Get the key from the restarted member:

```
$ etcdctl --endpoints=localhost:22379 get key
hello
```

Restarting the member re-establishs the connection. `etcdctl` will now be able to retrieve the key successfully. To learn more about interacting with etcd, read [interacting with etcd section][interacting].

[clustering]: https://etcd.io/docs/latest/op-guide/clustering/
[interacting]: https://etcd.io/docs/latest/dev-guide/interacting_v3/
Branch management

Guide

* New development occurs on the [main branch][main].
* The main branch should always have a green build!
* Backwards-compatible bug fixes should target the main branch and subsequently be ported to stable branches.
* Once the main branch is ready for release, it will be tagged and become the new stable branch.

The etcd team has adopted a *rolling release model* and supports two stable versions of etcd.

Main branch

The `main` branch is our development branch. All new features land here first.

To try new and experimental features, pull `main` and play with it. Note that `main` may not be stable because new features may introduce bugs.

Before the release of the next stable version, feature PRs will be frozen. A [release manager](./release.md#release-management) will be assigned to the major/minor version and will lead the etcd community in testing, bug-fix, and documentation of the release for one to two weeks.

Stable branches

All branches with
the prefix `release-` are considered _stable_ branches.

After every minor release (semver.org), we will have a new stable branch for that release, managed by a [patch release manager](./release.md#release-management). We will keep fixing the backward-compatible bugs for the latest two stable releases. A _patch_ release to each supported release branch, incorporating any bug fixes, will be once every two weeks, given any patches.

[main]: https://github.com/etcd-io/etcd/tree/main
Issue triage guidelines

Purpose

Speed up issue management.

The `etcd` issues are listed at <https://github.com/etcd-io/etcd/issues> and are identified with labels. For example, an issue that is identified as a bug will be set to the label `type/bug`.

The etcd project uses labels to indicate common attributes such as `area`, `type`, and `priority` of incoming issues.

New issues will often start without any labels, but typically `etcd` maintainers, reviewers, and members will add

labels by following these triage guidelines. The detailed list of labels can be found at <https://github.com/etcd-io/etcd/labels>.

Scope

This document serves as the primary guidelines for triaging incoming issues in `etcd`.

All contributors are encouraged and welcome to help manage issues which will help reduce the burden on project maintainers, though the work and responsibilities discussed in this document are created with `etcd` project reviewers and members in mind as these individuals will have
triage access to the etcd project which is a requirement for actions like applying labels or closing issues.

Refer to [etcd community membership](https://github.com/etcd-io/etcd/blob/main/Documentation/contributor-guide/community-membership.md) for guidance on becoming an etcd project member or reviewer.

Step 1 - Find an issue to triage

To get started you can use the following recommended issue searches to identify issues that are in need of triage:

* [Issues that have no labels](https://github.com/etcd-io/etcd/issues?q=is%3Aissue+is%3Aopen+sort%3Aupdated+no%3Alabel)
* [Issues created recently](https://github.com/etcd-io/etcd/issues?q=is%3Aissue+is%3Aopen+)
* [Issues not assigned but linked pr](https://github.com/etcd-io/etcd/issues?q=is%3Aopen+is%3Aissue+no%3Aassignee+linked%3Apr)
* [Issues with no comments](https://github.com/etcd-io/etcd/issues?q=is%3Aopen+is%3Aissue+comments%3A0+)
* [Issues with help wanted](https://github.com/etcd-io/etcd/issues?q=is%3Aopen+is%3Aissue+label%3A%22help+wanted%22+)

##
Step 2 - Check the issue is valid

Before we start adding labels or trying to work out a priority, our first triage step needs to be working out if the issue actually belongs to the etcd project and is not a duplicate.

Issues that don't belong to etcd

Sometimes issues are reported that belong to other projects that `etcd` use. For example, `grpc` or `golang` issues. Such issues should be addressed by asking the reporter to open issues in the appropriate other projects.

These issues can generally be closed unless a maintainer and issue reporter see a need to keep it open for tracking purposes. If you have triage permissions please close it, alternatively mention the @etcd-io/members group to request a member with triage access to close the issue.

Duplicate issues

If an issue is a duplicate, add a comment stating so along with a reference for the original issue and if you have triage permissions please close it, alternatively mention the @etcd-io/members

group to request a member with triage access close the issue.

Step 3 - Apply the appropriate type of label

Adding a `type` label to an issue helps create visibility on the health of the project and helps contributors identify potential priorities, i.e. addressing existing bugs or test flakes before implementing new features.

Support requests

As a general rule, the focus for etcd support is to address common themes in a broad way that helps all users, i.e. through channels like known issues, frequently asked questions, and high-quality documentation. To make the best use of project members time we should avoid providing 1:1 support if a broad approach is available.

Some people mistakenly use our GitHub bug report or feature request templates to file support requests. Usually, they are asking for help operating or configuring some aspect of etcd. Support requests for etcd should instead be raised as [discussions](https://github.com/etcd-io/etcd/discussions).

Common
types of support requests are:

1. Questions about configuring or operating existing well-documented etcd features, for example, <https://github.com/etcd-io/etcd/issues/15945>. Note - If an existing feature is not well documented please apply the `area/documentation` label and propose documentation improvements that would prevent future users from stumbling on the problem again.

2. Bug reports or questions about unsupported versions of etcd, for example <https://github.com/etcd-io/etcd/issues/15796>. When responding to these issues please refer to our [supported versions documentation](https://etcd.io/docs/latest/op-guide/versioning) and encourage the reporter to upgrade to a recent patch release of a supported version as soon as possible. We should limit the effort supporting users that do not make the effort to run a supported version of etcd or ensure their version is patched.

3. Bug reports that do not provide a complete list of steps to reproduce the issue and/or contributors
are not able to reproduce the issue, for example, <https://github.com/etcd-io/etcd/issues/15740>. We should limit the effort we put into reproducing issues ourselves and motivate users to provide the necessary information to accept the bug report.

4. General questions that are filed using feature request or bug report issue templates, for example, <https://github.com/etcd-io/etcd/issues/15914>. Note - These types of requests may surface good additions to our [frequently asked questions](https://etcd.io/docs/v3.5/faq).

If you identify that an issue is a support request please:

1. Add the `type/support` or `type/question` label.

2. Add the following comment to inform the issue creator that discussions should be used instead and that this issue will be converted to a discussion.

> Thank you for your question, this support issue will be moved to our [Discussion

Forums](https://github.com/etcd-io/etcd/discussions).
  >
  > We are trying to consolidate the channels to which
 questions for help/support are posted so that we can improve our efficiency in responding to your requests, and make it easier for you to find answers to frequently asked questions and how to address common use cases.
  >
  > We regularly see messages posted in multiple forums, with the full response thread only in one place or, worse, spread across multiple forums. Also, the large volume of support issues on GitHub is making it difficult for us to use issues to identify real bugs.
  >
  > Members of the etcd community use Discussion Forums to field support requests. Before posting a new question, please search these for answers to similar questions, and also familiarize yourself with:
  >
  > 1. [user documentation](https://etcd.io/docs/latest)
  > 2. [frequently asked questions](https://etcd.io/docs/v3.5/faq)
  >
  > Again, thanks for using etcd and raising this question.
  >
  > The etcd team

3. Finally, click `Convert to discussion` on the right-hand panel,
 selecting the appropriate discussion category.

Bug reports

If an issue has been raised as a bug it should already have the `type/bug` label, however, if this is missing for an issue you determine to be a bug please add the label manually.

The next step is to validate if the issue is indeed a bug. If not, add a comment with the findings and close the trivial issue. For non-trivial issues, wait to hear back from the issue reporter and see if there is any objection. If the issue reporter does not reply in 30 days, close the issue.

If the problem can not be reproduced or requires more information, leave a comment for the issue reporter as soon as possible while the issue is fresh for the issue reporter.

Feature requests

New feature requests should be created via the etcd feature request template and in theory already have the `type/feature` label, however, if this is missing for an issue you determine to be a feature please add the label manually.

Test flakes

Test flakes
 are a specific type of bug that the etcd project tracks separately as these are a priority to address. These should be created via the test flake template and in theory already have the `type/flake` label, however, if this is missing for an issue you determine to be related to a flaking test please add the label manually.

Step 4 - Define the areas impacted

Adding an `area` label to an issue helps create visibility on which areas of the etcd project require attention and helps contributors find issues to work on relating to their particular skills or knowledge of the etcd codebase.

If an issue crosses multiple domains please add additional `area` labels to reflect that.

Below is a brief summary of the area labels in active use by the etcd project along with any notes on their use:

Label	Notes
area/external	Tracking label for issues raised that are external to etcd.
area/community	
area/raft	
area/clientv3	
area/performance	
area/security	
area/tls	
area/auth	
area/etcdctl	
area/etcdutl	
area/contrib	Not to be confused with `area/community` this label is specifically used for issues relating to community-maintained scripts or files in the `contrib/` directory which aren't part of the core etcd project.
area/documentation	
area/tooling	Generally used in relation to the third party / external utilities or tools that are used in various stages of the etcd build, test, or release process, for example, tooling to create sboms.
area/testing	
area/robustness-testing	

Step 5 - Prioritise the issue

If an issue lacks a priority label it has not been formally prioritized yet.

Adding a `priority` label helps the etcd project understand what is important and should be worked on now, and conversely, what is not as important and is on the project backlog.

Priority label	What it means	Examples
`priority/critical-urgent`	Maintainers are responsible for making sure that these issues (in their area) are being actively worked oni.e., drop what you're doing. The stuff is burning. These should be fixed before the next release.	user-visible critical bugs in core features broken builds on tier1 supported platforms tests and critical security issues
`priority/important-soon`	Must be staffed and worked on either currently or very soonideally in time for the next release.	
`priority/important-longterm`	Important over the long term, but may not be currently staffed and/or may require multiple releases to complete.	

| `priority/backlog` | General agreement that this is a nice-to-have, but no one's available to work on it anytime soon. Community contributions would be most welcome in the meantime, though it might take a while to get them reviewed if reviewers are fully occupied with higher-priority issuesfor example, immediately before a release.| |
| `priority/awaiting-more-evidence`
| Possibly useful, but not yet enough support to actually get it done. | Mostly placeholders for potentially good ideas, so that they don't get completely forgotten, and can be referenced or deduped every time they come up |

Step 6 - Support new contributors

As part of the `etcd` triage process once the `kind` and `area` have been determined, please consider if the issue would be suitable for a less experienced contributor. The `good first issue` label is a subset of the `help wanted` label, indicating that members have committed to providing extra assistance for new contributors. All `good first issue` items also have the `help wanted` label.

Help wanted

Items marked with the `help wanted` label need to ensure that they meet these criteria:

* **Low Barrier to Entry** - It should be easy for new contributors.

* **Clear** - The task is agreed upon and does not require further discussions in the community.

* **Goldilocks priority** - The priority
should not be so high that a core contributor should do it, but not too low that it isnt useful enough for a core contributor to spend time reviewing it, answering questions, helping get it into a release, etc.

Good first issue

Items marked with `good first issue` are intended for first-time contributors. It indicates that members will keep an eye out for these pull requests and shepherd it through our processes.

New contributors should not be left to find an approver, ping for reviews, decipher test commands, or identify that their build failed due to a flake. It is important to make new contributors feel welcome and valued. We should assure them that they will have an extra level of help with their first contribution.

After a contributor has successfully completed one or two `good first issue` items, they should be ready to move on to `help wanted` items.

* **No Barrier to Entry** - The task is something that a new contributor can tackle without advanced setup or domain knowledge.

*
Solution Explained - The recommended solution is clearly described in the issue.

* **Gives Examples** - Link to examples of similar implementations so new contributors have a reference guide for their changes.

* **Identifies Relevant Code** - The relevant code and tests to be changed should be linked in the issue.

* **Ready to Test** - There should be existing tests that can be modified, or existing test cases fit to be copied. If the area of code doesnt have tests, before labeling the issue, add a test fixture. This prep often makes a great help wanted task!

Step 7 - Follow up

Once initial triage has been completed, issues need to be re-evaluated over time to ensure they don't become stale incorrectly.

Track important issues

If an issue is at risk of being closed by the stale bot in the future, but is an important issue for the etcd project, then please apply the `stage/tracked` label and remove any `stale` labels that exist. This will ensure the project does not lose sight of the issue.

Close incomplete issues

Issues that lack enough information from the issue reporter should be closed if the issue reporter does not provide information in 30 days. Issues can always be re-opened at a later date if new information is provided.

Check for incomplete work

If an issue owned by a developer has no pull request created in 30 days, contact the issue owner and kindly ask about the status of their work, or to release ownership on the issue if needed.
PR management

Purpose

Speed up PR management.

The `etcd` PRs are listed at https://github.com/etcd-io/etcd/pulls
A PR can have various labels, milestones, reviewers, etc. The detailed list of labels can be found at https://github.com/kubernetes/kubernetes/labels

Following are a few example searches on PR for convenience:
* [Open PRS for milestone etcd-v3.6](https://github.com/etcd-io/etcd/pulls?utf8=%E2%9C%93&q=is%3Apr+is%3Aopen+milestone%3Aetcd-v3.6)
* [PRs under investigation](https://github.com/etcd-io/etcd/labels/Investigating)

Scope

These guidelines serve as a primary document for managing PRs in `etcd`. Everyone is welcome to help manage PRs but the work and responsibilities discussed in this document are created with `etcd` maintainers and active contributors in mind.

Ensure tests are run

The etcd project use Kubernetes Prow and GitHub Actions to run tests. To ensure all required tests run if a pull request is ready for testing and still has the `needs-ok-to-test`
label then please comment on the pull request `/ok-to-test`.

Handle inactive PRs
Poke PR owner if review comments are not addressed in 15 days. If the PR owner does not reply in 90 days, update the PR with a new commit if possible. If not, inactive PR should be closed after 180 days.

Poke reviewer if needed

Reviewers are responsive in a timely fashion, but considering everyone is busy, give them some time after requesting a review if a quick response is not provided. If the response is not provided in 10 days, feel free to contact them via adding a comment in the PR or sending an email or message on Slack.

Verify important labels are in place

Make sure that appropriate reviewers are added to the PR. Also, make sure that a milestone is identified. If any of these or other important labels are missing, add them. If a correct label cannot be decided, leave a comment for the maintainers to do so as needed.
Roadmap

etcd uses GitHub milestones to track all tasks in each major or minor release. The `roadmap.md` file only records the
most important tasks for each release. The list is based on the current maintainer capacity that may shift over time. Proposed milestones are what we think we can deliver with the people we have. If we have more support on the important
stuff, we could pick up more items from the backlog. Note that etcd will continue to mainly focus on technical debt over
the next few major or minor releases.

Each item has an assigned priority. Refer to [priority definitions](https://github.com/etcd-io/etcd/blob/main/Documentation/contributor-guide/triage_issues.md#step-5---prioritise-the-issue).

v3.6.0

For a full list of tasks in `v3.6.0`, please see [milestone etcd-v3.6](https://github.com/etcd-io/etcd/milestone/38).

Title	Priority	Status	Note
[Support downgrade](https://github.com/etcd-io/etcd/issues/11716)	priority/important-soon	In progress	etcd will support downgrade starting from 3.6.0. But it will also support offline downgrade from 3.5 to 3.4.
[StoreV2 deprecation](https://github.com/etcd-io/etcd/issues/12913)	priority/important-soon	In progress	This task will be covered in both 3.6 and 3.7.
[Release raft 3.6.0](https://github.com/etcd-io/raft/issues/89)			

| priority/important-soon | Not started | etcd 3.6.0 will depends on raft 3.6.0
|
[Release bbolt 1.4.0](https://github.com/etcd-io/bbolt/issues/553)	priority/important-soon	Not started	etcd 3.6.0 will depends on bbolt 1.4.0
[Support /livez and /readyz endpoints](https://github.com/etcd-io/etcd/issues/16007)	priority/important-longterm	In progress	It provides clearer APIs, and can also work around the stalled writes issue
[Bump gRPC](https://github.com/etcd-io/etcd/issues/16290)	priority/important-longterm	Completed	It isn't guaranteed to be resolved in 3.6, and might be postponed to 3.7 depending on the effort and risk.
[Deprecate grpc-gateway
or bump it](https://github.com/etcd-io/etcd/issues/14499)	priority/important-longterm	Completed	It isn't guaranteed to be resolved in 3.6, and might be postponed to 3.7 depending on the effort and risk.
[bbolt: Add logger into bbolt](https://github.com/etcd-io/bbolt/issues/509)	priority/important-longterm	Completed	It's important to diagnose bbolt issues
[bbolt: Add surgery commands](https://github.com/etcd-io/bbolt/issues/370)	priority/important-longterm	Completed	Surgery commands are important for fixing corrupted db files
[Evaluate and (Gradulate or deprecate/remove) experimental features](https://github.com/etcd-io/etcd/issues/16292)	priority/backlog	Not started	This task will be covered in both 3.6 and
3.7.

v3.7.0

For a full list of tasks in `v3.7.0`, please see [milestone etcd-v3.7](https://github.com/etcd-io/etcd/milestone/39).

Title	Priority	Note
[StoreV2 deprecation](https://github.com/etcd-io/etcd/issues/12913)	P0	Finish the remaining tasks 3.7.
[Refactor lease: Lease might be revoked by mistake by old leader](https://github.com/etcd-io/etcd/issues/15247)	P1	to be investigated & discussed
[Integrate raft's new feature (async write) into etcd](https://github.com/etcd-io/etcd/issues/16291)	P1	It should improve the performance
[bbolt: Support customizing the bbolt rebalance threshold](https://github.com/etcd-io/bbolt/issues/422)	P2	It may get rid of etcd's defragmentation. Both bbolt and etcd need to be changed.
[Evaluate and (graduate or deprecate/remove) experimental features](https://github.com/etcd-io/etcd/issues/16292)	P2	Finish the remaining tasks 3.7.

Backlog (future releases)

Title	Priority	Note

| [Remove the dependency on
grpc-go's experimental API](https://github.com/etcd-io/etcd/issues/15145) | | |
| [Protobuf: cleanup both golang/protobuf and gogo/protobuf](https://github.com/etcd-io/etcd/issues/14533) | |
|
[Proposals should include a merkle root](https://github.com/etcd-io/etcd/issues/13839)		
[Add Distributed Tracing using OpenTelemetry](https://github.com/etcd-io/etcd/issues/12460)		
[Support CA rotation](https://github.com/etcd-io/etcd/issues/11555)		
[bbolt: Migrate all commands to cobra style commands](https://github.com/etcd-io/bbolt/issues/472)	
[raft: enhance the configuration change validation](https://github.com/etcd-io/raft/issues/80)		
Release

The guide talks about how to release a new version of etcd.

The procedure includes some manual steps for sanity checking, but it can probably be further scripted. Please keep this document up-to-date if making changes to the release process.

Release management

The following pool of release candidates manages the release of each etcd major/minor version as well as manages patches
to each stable release branch. They are responsible for communicating the timelines and status of each release and for ensuring the stability of the release branch.

- Benjamin Wang [@ahrtr](https://github.com/ahrtr)
- James Blair [@jmhbnz](https://github.com/jmhbnz)
- Marek Siarkowicz [@serathius](https://github.com/serathius)
- Sahdev Zala [@spzala](https://github.com/spzala)
- Wenjia Zhang [@wenjiaswe](https://github.com/wenjiaswe)

All release version numbers follow the format of [semantic versioning 2.0.0](http://semver.org/).

Major, minor version release, or its pre-release

- Ensure
the relevant [milestone](https://github.com/etcd-io/etcd/milestones) on GitHub is complete. All referenced issues should be closed or moved elsewhere.
- Ensure the latest [upgrade documentation](https://etcd.io/docs/next/upgrades) is available.
- Bump [hardcoded MinClusterVerion in the repository](https://github.com/etcd-io/etcd/blob/v3.4.15/version/version.go#L29), if necessary.
- Add feature capability maps for the new version, if necessary.

Patch version release

- To request a backport, developers submit cherry-pick PRs targeting the release branch. The commits should not include merge commits. The commits should be restricted to bug fixes and security patches.
- The cherrypick PRs should target the appropriate release branch (`base:release-<major>-<minor>`). The k8s infra cherry pick robot `/cherrypick <branch>` PR chatops command may be used to automatically generate cherrypick

PRs.
- The release patch manager reviews the cherrypick PRs. Please discuss carefully what is backported
 to the patch release. Each patch release should be strictly better than its predecessor.
- The release patch manager will cherry-pick these commits starting from the oldest one into stable branch.

Write a release note

- Write an introduction for the new release. For example, what major bug we fix, what new features we introduce, or what performance improvement we make.
- Put `[GH XXXX]` at the head of the change line to reference the Pull Request that introduces the change. Moreover, add a link on it to jump to the Pull Request.
- Find PRs with the `release-note` label and explain them in the `NEWS` file, as a straightforward summary of changes for end-users.

Patch release criteria

The etcd project aims to release a new patch version if any of the following conditions are met:

- Fixed one or more major CVEs (>=7.5).
- Fixed one or more critical bugs.
- Fixed three or more major bugs.
- Fixed five or more minor bugs.

Release guide

Prerequisites

There are some
 prerequisites, which should be done before the release process. These are one-time operations,
which don't need to be executed before releasing each version.
1. Generate a GPG key and add it to your GitHub account. Refer to the links on
[settings](https://github.com/settings/keys).
2. Ensure you have a Linux machine, on which the git, Golang, and docker have been installed.
   - Ensure the Golang version matches the version defined in `.go-version` file.
   - Ensure non-privileged users can run docker commands, refer to the [Linux
postinstall](https://docs.docker.com/engine/install/linux-postinstall/).
   - Ensure there is at least 5GB of free space on your Linux machine.
3. Install gsutil, refer to [gsutil_install](https://cloud.google.com/storage/docs/gsutil_install). When asked about cloud project to use, pick `etcd-development`.
4. Authenticate the image registry, refer to [Authentication methods](https://cloud.google.com/container-registry/docs/advanced-authentication).
  - `gcloud
 auth login`
  - `gcloud auth configure-docker`
5. Install gh, refer to [GitHub's documentation](https://github.com/cli/cli#installation). Ensure that running
  `gh auth login` succeeds for the GitHub account you use to contribute to etcd,
  and that `gh auth status` has a clean exit and doesn't show any issues.

Release steps

1. Raise an issue to publish the release plan, e.g. [issues/17350](https://github.com/etcd-io/etcd/issues/17350).
2. Raise a `kubernetes/org` pull request to temporarily elevate permissions for the GitHub release team.
3. Once permissions are elevated, temporarily relax [branch protections](https://github.com/etcd-io/etcd/settings/branches) to allow pushing changes directly to `release-*` branches in GitHub.
4. Verify you can pass the authentication to the image registries,
 - `docker login gcr.io`
 - `docker login quay.io`
   - If the release person doesn't have access to 1password, one of the owners (@ahrtr, @ivanvc, @jmhbnz, @serathius) needs
 to share the password with them per [this guide](https://support.1password.com/share-items/). See rough steps below,
     - [Sign in](https://team-etcd.1password.com/home) to your account on 1password.com.
     - Click `Your Vault Items` on the right side.
     - Select `Password of quay.io`.
     - Click `Share` on the top right, and set expiration as `1 hour` and only available to the release person using his/her email.
     - Click `Copy Link` then send the link to the release person via slack or email.
5. Clone the etcd repository and checkout the target branch,
 - `git clone --branch release-3.X git@github.com:etcd-io/etcd.git`
6. Run the release script under the repository's root directory, replacing `${VERSION}` with a value without the `v` prefix, i.e. `3.5.13`.
 - `DRY_RUN=false ./scripts/release.sh ${VERSION}`
 - **NOTE:** When doing a pre-release (i.e., a version from the main branch, 3.6.0-alpha.2), you will need to explicitly set the branch to main:

  ```
   DRY_RUN=false BRANCH=main ./scripts/release.sh ${VERSION}
   ```

  It generates all release binaries under the directory `/tmp/etcd-release-${VERSION}/etcd/release/` and images. Binaries are pushed to the Google Cloud bucket
  under project `etcd-development`, and images are pushed to `quay.io` and `gcr.io`.
7. Publish the release page on GitHub
 - Open the **draft** release URL shown by the release script
 - Click the pen button at the top right to edit the release
 - Review that it looks correct, reviewing that the bottom checkboxes are checked depending on the
   release version (v3.4 no checkboxes, v3.5 has the set as latest release checkbox checked,
   v3.6 has the set as pre-release checkbox checked)
 - Then, publish the release
8. Announce to the etcd-dev googlegroup

  Follow the format of previous release emails sent to etcd-dev@googlegroups.com, see an example below. After sending out the email, ask one of the mailing list maintainers to approve the
  email from the pending list. Additionally, label the release email as `Release`.

```text
```

Hello,

etcd v3.4.30 is now public!

https://github.com/etcd-io/etcd/releases/tag/v3.4.30

Thanks to everyone who contributed to the release!

etcd team
```

9. Update the changelog to reflect the correct release date.
10. Paste the release link to the issue raised in Step 1 and close the issue.
11. Restore standard branch protection settings and raise a follow-up `kubernetes/org` pull request to return to least privilege permissions.
12. Crease a new stable branch through `git push origin release-${VERSION_MAJOR}.${VERSION_MINOR}` if this is a new major or minor stable release.
13. Re-generate a new password for quay.io if needed (e.g. shared to a contributor who isn't in the release team, and we should rotate the password at least once every 3 months).

#### Release known issues

1. Timeouts pushing binaries - If binaries fail to fully upload to Google Cloud storage, the script must be re-run using the same command. Any artifacts that are already pushed will be overwritten to ensure they are correct. The storage bucket does not use object versioning so incorrect files cannot remain.

2. Timeouts pushing images - It is rare, although possible for connection timeouts to occur when publishing etcd release images to `quay.io` or `gcr.io`. If this occurs, it is known to be safe to rerun the release script command appending the `--no-upload` flag, and image uploads will gracefully resume.

3. GPG vs SSH signing - The release scripts assume that git tags will be signed with a GPG key. Since 2022 GitHub has supported [signing commits and tags using ssh](https://github.blog/changelog/2022-08-23-ssh-commit-verification-now-supported). Until further release script updates are completed you will need to disable this feature in your `~/.gitconfig` and revert to signing via GPG to perform etcd releases.
# Golang modules

The etcd project (since version 3.5) is organized into multiple
[golang modules](https://golang.org/ref/mod) hosted in a [single repository](https://golang.org/ref/mod#vcs-dir).




There are the following modules:

- **go.etcd.io/etcd/api/v3** - contains API definitions
(like protos & proto-generated libraries) that defines communication protocol
between etcd clients and servers.

- **go.etcd.io/etcd/pkg/v3** - a collection of utility packages used by etcd
```

without being specific to etcd itself. A package belongs here
only if it could possibly be moved out into its own repository in the future.
Please avoid adding here code that has a lot of dependencies on its own, as
they automatically become dependencies of the client library
(that we want to keep lightweight).

- **go.etcd.io/etcd/client/v3** - client library used to contact etcd over
the network (grpc). Recommended for all new usage of etcd.

- **go.etcd.io/raft/v3**
- implementation of distributed consensus
protocol. Should have no etcd specific code. Hosted in a separate repository:
https://github.com/etcd-io/raft.

- **go.etcd.io/etcd/server/v3** - etcd implementation.
The code in this package is internal to etcd and should not be consumed
by external projects. The package layout and API can change within the minor versions.

- **go.etcd.io/etcd/etcdctl/v3** - a command line tool to access and manage etcd.

- **go.etcd.io/etcd/tests/v3** - a module that contains all integration tests of etcd.
  Notice: All unit tests (fast and not requiring cross-module dependencies)
  should be kept in the local modules of the code under the test.

- **go.etcd.io/bbolt** - implementation of persistent b-tree.
  Hosted in a separate repository: https://github.com/etcd-io/bbolt.

Operations

1. All etcd modules should be released in the same versions, e.g.
  `go.etcd.io/etcd/client/v3@v3.5.10` must depend on `go.etcd.io/etcd/api/v3@v3.5.10`.

   The consistent updating of versions can be performed using:
  ```shell script
  % DRY_RUN=false TARGET_VERSION="v3.5.10" ./scripts/release_mod.sh update_versions
  ```
2. The released modules should be tagged according to https://golang.org/ref/mod#vcs-version rules,
  i.e. each module should get its own tag.
  The tagging can be performed using:
  ```shell script
  % DRY_RUN=false REMOTE_REPO="origin" ./scripts/release_mod.sh push_mod_tags
  ```

3. All etcd modules should depend on the same versions of underlying dependencies.
  This can be verified using:
  ```shell script
  % PASSES="dep" ./test.sh
  ```

```

4. The go.mod files must not contain dependencies not being used and must
 conform to `go mod tidy` format.
 This is being verified by:
 ```
 % PASSES="mod_tidy" ./test.sh
 ```

5. To trigger actions across all modules (e.g. auto-format all files), please
 use/expand the following script:
 ```shell script
 % ./scripts/fix.sh
 ```

###
 Future

As a North Star, we would like to evaluate etcd modules towards the following model:

![modules graph](modules-future.svg)

This assumes:
 - Splitting etcdmigrate/etcdadm out of etcdctl binary.
  Thanks to this etcdctl would become clearly a command-line wrapper
  around network client API,
  while etcdmigrate/etcdadm would support direct physical operations on the
  etcd storage files.
 - Splitting etcd-proxy out of ./etcd binary, as it contains more experimental code
  so carries additional risk & dependencies.
 - Deprecation of support for v2 protocol.
Reporting bugs

If any part of the etcd project has bugs or documentation mistakes, please let us know by [opening an issue][etcd-issue]. We treat bugs and mistakes very seriously and believe no issue is too small. Before creating a bug report, please check that an issue reporting the same problem does not already exist.

To make the bug report accurate and easy to understand, please try to create bug reports that are:

- Specific. Include as many details as possible: which version, what environment, what configuration, etc. If the bug is related to running the etcd server, please attach the etcd log (the starting log with the etcd configuration is especially important).

- Reproducible. Include the steps to reproduce the problem. We understand some issues might be hard to reproduce, please include the steps that might lead to the problem. If possible, please attach the affected etcd data dir and stack trace to the bug report.

- Isolated. Please try to isolate and reproduce the bug with
 ```

minimum dependencies. It would significantly slow down the speed to fix a bug if too many dependencies are involved in a bug report. Debugging external systems that rely on etcd is out of scope, but we are happy to provide guidance in the right direction or help with using etcd itself.

- Unique. Do not duplicate existing bug reports.

- Scoped. One bug per report. Do not follow up with another bug inside one report.

It may be worthwhile to read [Elika Etemads article on filing good bug reports][filing-good-bugs] before creating a bug report.

We might ask for further information to locate a bug. A duplicated bug report will be closed.

Frequently asked questions

How to get a stack trace

``` bash
$ kill -QUIT $PID
```

How to get the etcd version

``` bash
$ etcd --version
```

How to get etcd configuration and log when it runs as systemd service etcd2.service

``` bash
$ sudo systemctl cat etcd2
$ sudo journalctl -u etcd2
```

Due to an upstream systemd bug, journald
may miss the last few log lines when its processes exit. If journalctl says etcd stopped without a fatal or panic message, try `sudo journalctl -f -t etcd2` to get the full log.

[etcd-issue]: https://github.com/etcd-io/etcd/issues/new
[filing-good-bugs]: http://fantasai.inkedblade.net/style/talks/filing-good-bugs/
Community membership

This doc outlines the various responsibilities of contributor roles in etcd.

Role	Responsibilities	Requirements	Defined by

Member	Active contributor in the community	Sponsored by 2 reviewers and multiple contributions	etcd GitHub org member
Reviewer	Review contributions from other members	History of review and authorship	[OWNERS] file reviewer entry
Maintainer	Set direction and priorities for the project	Demonstrated responsibility and excellent technical judgement	[OWNERS] file approver entry

New contributors

New contributors should be welcomed to the community by existing members,
helped with
PR workflow, and directed to relevant documentation and
communication channels.

Established community members

Established community members are expected to demonstrate their adherence to the
principles in this document, familiarity with project organization, roles,
policies, procedures, conventions, etc., and technical and/or writing ability.
Role-specific expectations, responsibilities, and requirements are enumerated
below.

Member

Members are continuously active contributors to the community. They can have
issues and PRs assigned to them. Members are expected to remain active
contributors to the community.

Defined by: Member of the etcd GitHub organization.

Requirements

- Enabled [two-factor authentication] on their GitHub account
- Have made multiple contributions to the project or community. Contribution may include, but is not limited to:
  - Authoring or reviewing PRs on GitHub. At least one PR must be **merged**.
  - Filing or commenting on issues on
GitHub
  - Contributing to community discussions (e.g. meetings, Slack, email discussion
    forums, Stack Overflow)
- Subscribed to [etcd-dev@googlegroups.com](https://groups.google.com/g/etcd-dev)
- Have read the [contributor guide]
- Sponsored by two active maintainers or reviewers.
  - Sponsors must be from multiple member companies to demonstrate integration across the community.
  - With no objections from other maintainers
- Open a [membership nomination] issue against the `kubernetes/org` repo
  - Ensure your sponsors are @mentioned on the issue
  - Make sure that the list of contributions included is representative of your work on the project.
- Members can be removed by a supermajority of the maintainers or can resign by notifying

the maintainers.

Responsibilities and privileges

- Responsive to issues and PRs assigned to them
- Granted "triage access" to etcd project
- Active owner of code they have contributed (unless ownership is explicitly transferred)
  - Code is well-tested
  - Tests consistently pass
  - Addresses bugs or issues discovered after code is accepted

Note: Members who frequently contribute code are expected to proactively perform code reviews and work towards becoming a *reviewer*.

Reviewers

Reviewers are contributors who have demonstrated greater skill in reviewing the code from other contributors. They are knowledgeable about both the codebase and software engineering principles. Their LGTM counts towards merging a code change into the project. A reviewer is generally on the ladder towards maintainership.

Defined by: *reviewers* entry in the [OWNERS] file.

Requirements

- member for at least 3 months.
- Primary reviewer for at least 5 PRs to the codebase.
- Reviewed or contributed at least 20 substantial PRs to the codebase.
- Knowledgeable about the codebase.
- Sponsored by two active maintainers.
  - Sponsors must be from multiple member companies to demonstrate integration across the community.
  - With no objections from other maintainers
- Reviewers can be removed by a supermajority of the maintainers or can resign by notifying the maintainers.

Responsibilities and privileges

- Code reviewer status may be a precondition to accepting large code contributions
- Responsible for project quality control via code reviews
  - Focus on code quality and correctness, including testing and factoring
  - May also review for more holistic issues, but not a requirement
- Expected to be responsive to review requests
- Assigned PRs to review related to area of expertise
- Assigned test bugs related to area of expertise
- Granted "triage access" to etcd project

Maintainers

Maintainers are first and foremost contributors who have shown they
are committed to the long-term success of a project. Maintainership is about building
trust with the current maintainers and being a person that they can
depend on to make decisions in the best interest of the project in a consistent
manner.

Defined by: *approvers* entry in the [OWNERS] file.

Requirements

- Deep understanding of the technical goals and direction of the project
- Deep understanding of the technical domain of the project
- Sustained contributions to design and direction by doing all of:
  - Authoring and reviewing proposals
  - Initiating, contributing, and resolving discussions (emails, GitHub issues, meetings)
  - Identifying subtle or complex issues in the designs and implementation of PRs
- Directly contributed to the project through implementation and/or review
- Sponsored by two active maintainers and elected by supermajority
  - Sponsors must be from multiple member companies to demonstrate integration across the community.
- To become a maintainer send an email with your candidacy to etcd-maintainers-private@googlegroups.com
  - Ensure your sponsors are @mentioned in the email
  - Include a list of contributions representative of your work on the project.
  -
Existing maintainers vote will privately and respond to the email with either acceptance or feedback for suggested improvement.
- With your membership approved you are expected to:
 - Open a PR and add an entry to the [OWNERS] file
 - Subscribe to etcd-maintainers@googlegroups.com and etcd-maintainers-private@googlegroups.com
 - Request to join [etcd-maintainer teams of etcd organization of GitHub](https://github.com/orgs/etcd-io/teams/maintainers-etcd)
 - Request to join the private slack channel for etcd maintainers on [kubernetes slack](http://slack.kubernetes.io/)
 - Request access to etcd-development GCP project where we publish releases
 - Request access to passwords shared between maintainers

Responsibilities and privileges

- Make and approve technical design decisions
- Set technical direction and priorities
- Define milestones and releases
- Mentor and guide reviewers, and contributors to the project.
- Participate when called upon in the [security disclosure and
release process]
- Ensure the continued health of the project
  - Adequate test coverage to confidently release
  - Tests are passing reliably (i.e. not flaky) and are fixed when they fail
- Ensure a healthy process for discussion and decision-making is in place.

- Work with other maintainers to maintain the project's overall health and success holistically

Retiring

Life priorities, interests, and passions can change. Maintainers can retire and
move to [emeritus maintainers]. If a maintainer needs to step down, they should
inform other maintainers and, if possible, help find someone to pick up the related
work. At the very least, ensure the related work can be continued. Afterward,
they can remove themselves from the list of existing maintainers.

If a maintainer has not been performing their duties for 12 months,
they can be removed by other maintainers. In that case, the inactive maintainer will
be first notified via an email. If the situation doesn't improve, they will be
removed.
If an emeritus maintainer wants to regain an active role, they can do
so by renewing their contributions. Active maintainers should welcome such a move.
Retiring other maintainers or regaining the status should require the approval
of at least two active maintainers.

Acknowledgements

Contributor roles and responsibilities were written based on [Kubernetes community membership]

[OWNERS]: /OWNERS
[contributor guide]: /CONTRIBUTING.md
[membership nomination]: https://github.com/kubernetes/org/issues/new?assignees=&labels=area%2Fgithub-membership&projects=&template=membership.yml&title=REQUEST%3A+New+membership+for+%3Cyour-GH-handle%3E
[Kubernetes community membership]: https://github.com/kubernetes/community/blob/master/community-membership.md
[emeritus maintainers]: /README.md#etcd-emeritus-maintainers
[security disclosure and release process]: /security/README.md
[two-factor authentication]: https://docs.github.com/en/authentication/securing-your-account-with-two-factor-authentication-2fa/about-two-factor-authentication

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source, and configuration files.

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Logging Conventions

etcd uses the [zap][zap] library for logging application output categorized into *levels*. A log message's level is determined according to these conventions:

* Debug: Everything is still fine, but even common operations may be logged, and less helpful but more quantity of notices. Usually not used in production.
 * Examples:
   * Send a normal message to a remote peer
   * Write a log entry to disk

* Info: Normal, working log information, everything is fine, but helpful notices for auditing or common operations. Should rather not be logged more frequently than once per a few seconds in a normal server's operation.
 * Examples:
   * Startup configuration
   * Start to do a snapshot

* Warning: (Hopefully) Temporary conditions that may cause errors, but may work fine. A replica disappearing (that may reconnect) is a warning.
 * Examples:
   * Failure to send a raft message to a remote peer
   * Failure to receive heartbeat message within the configured election
 timeout

* Error: Data has been lost, a request has failed for a bad reason, or a required resource has been lost.
 * Examples:
   * Failure to allocate disk space for WAL

* Panic: Unrecoverable or unexpected error situation that requires stopping execution.
 * Examples:
   * Failure to create the database

* Fatal: Unrecoverable or unexpected error situation that requires immediate exit. Mostly used in the test.
 * Examples:
   * Failure to find the data directory
   * Failure to run a test function

[zap]: https://github.com/uber-go/zap
Dependency management

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Main branch

The dependabot is enabled & [configured](https://github.com/etcd-io/etcd/blob/main/.github/dependabot.yml) to manage dependencies for etcd `main` branch. But dependabot doesn't work well for multi-module repository like `etcd`,
see [dependabot-core/issues/6678](https://github.com/dependabot/dependabot-core/issues/6678).
Usually, human intervention is required
each time when dependabot automatically opens some PRs to bump dependencies.
Please see the guidance below.

Dependencies used in workflows

The PRs that automatically bump dependencies (see examples below) used in workflows are fine and can be approved & merged directly as long as all checks are successful.

- [build(deps): bump github/codeql-action from 2.2.11 to 2.2.12](https://github.com/etcd-io/etcd/pull/15736)
- [build(deps): bump actions/checkout from 3.5.0 to 3.5.2](https://github.com/etcd-io/etcd/pull/15735)
- [build(deps): bump ossf/scorecard-action from 2.1.2 to 2.1.3](https://github.com/etcd-io/etcd/pull/15607)

Bumping order

When multiple etcd modules depend on the same package, please bump the package version for all the modules in the correct order. The rule is simple:
if module A depends on module B, then bump the dependency for module B before module A. If the two modules do not depend on each other, then
it doesn't matter to bump which module first. For
example, multiple modules depend on `github.com/spf13/cobra`, so we need to bump the dependency
in the following order,

- go.etcd.io/etcd/pkg/v3
- go.etcd.io/etcd/server/v3
- go.etcd.io/etcd/etcdctl/v3
- go.etcd.io/etcd/etcdutl/v3
- go.etcd.io/etcd/tests/v3
- go.etcd.io/etcd/v3
- go.etcd.io/etcd/tools/v3

For more details about etcd Golang modules, please check <https://etcd.io/docs/next/dev-internal/modules>

Note the module `go.etcd.io/etcd/tools/v3` doesn't depend on any other modules, nor by any other modules, so it doesn't matter when to bump dependencies for it.

Steps to bump a dependency

Use the `github.com/spf13/cobra` as an example, follow the steps below to bump it from 1.6.1 to 1.7.0 for module `go.etcd.io/etcd/etcdctl/v3`,

```bash
cd ${ETCD_ROOT_DIR}/etcdctl
go get github.com/spf13/cobra@v1.7.0
go mod tidy
cd ..
./scripts/fix.sh
```

Execute the same steps for all other modules. When you finish bumping the dependency for all modules, then commit the change,

```bash
git
 add .
git commit --signoff -m "dependency: bump github.com/spf13/cobra from 1.6.1 to 1.7.0"
```

Please close the related PRs which were automatically opened by dependabot.

When you bump multiple dependencies in one PR, it's recommended to create a separate commit for each dependency. But it isn't a must; for example,
you can get all dependencies bumping for the module `go.etcd.io/etcd/tools/v3` included in one commit.

Troubleshooting

In an event of bumping the version of protoc, protoc plugins or grpc-gateway, it might change `*.proto` file which can result in the following error:

```bash
[0;31mFAIL: 'genproto' FAILED at Wed Jul 31 07:09:08 UTC 2024
make: *** [Makefile:134: verify-genproto] Error 255
```

To fix the above error, run the following script from the root of etcd repository:

```bash
./scripts/genproto.sh
```

Indirect dependencies

Usually, we don't bump a dependency if all modules just indirectly depend on it, such as `github.com/go-logr/logr`.

If
 an indirect dependency (e.g. `D1`) causes any CVE or bugs that affect etcd, usually the module (e.g. `M1`, not part of etcd, but used by etcd)
which depends on it should bump the dependency (`D1`), and then etcd just needs to bump `M1`. However, if the module (`M1`) somehow doesn't
bump the problematic dependency, then etcd can still bump it (`D1`) directly following the same steps above. But as a long-term solution, etcd should
try to remove the dependency on such module (`M1`) that lack maintenance.

For mixed cases, in which some modules directly while others indirectly depend on a dependency, we have multiple options,

- Bump the dependency for all modules, no matter it's direct or indirect dependency.
- Bump the dependency only for modules that directly depend on it.

We should try to follow the first way, and temporarily fall back to the second one if we run into any issue on the first way. Eventually we
should fix the issue and ensure all modules depend on the same version of the
 dependency.

Known incompatible dependency updates

arduino/setup-protoc

Please refer to [build(deps): bump arduino/setup-protoc from 1.3.0 to 2.0.0](https://github.com/etcd-io/etcd/pull/16016)

Rotation worksheet

The dependabot scheduling interval is weekly; it means dependabot will automatically raise a bunch of PRs per week.
Usually, human intervention is required each time. We have a [rotation worksheet](https://docs.google.com/spreadsheets/d/1jodHIO7Dk2VWTs1IRnfMFaRktS9IH8XRyifOnPdSY8I/edit#gid=1394774387),
and everyone is welcome to participate; you just need to register your name in the worksheet.

Stable branches

Usually, we don't proactively bump dependencies for stable releases unless there are any CVEs or bugs that affect etcd.

If we have to do it, then follow the same guidance above. Note that there is no `./scripts/fix.sh` in release-3.4, so no need to
execute it for 3.4.

Golang versions

The etcd project aims to maintain a development branch that
 is on the latest [Go version](https://go.dev/dl), ideally, this will align with the Go version in use for Kubernetes project development. For an example of how to update etcd to a new minor release of Go refer to issue <https://github.com/etcd-io/etcd/issues/16393> and the linked pull requests.

Suggested steps for performing a minor version upgrade for the etcd development branch:

1. Carefully review new Go version release notes and potentially related blog posts for any deprecations, performance impacts, or other considerations.
2. Create a GitHub issue to signal intent to upgrade and invite discussion, for example, <https://github.com/etcd-io/etcd/issues/16393>.
3. Complete the upgrade locally in your development environment by editing `.go-version` and running `make fix`.
4. Run performance benchmarks locally to compare before and after.
5. Raise a pull request for the changes, for example, <https://github.com/etcd-io/etcd/pull/16394>.

Stable etcd release branches will be maintained
 to stay on the latest patch release of a supported Go version. Upgrading minor versions will be completed before the minor version in use currently is no longer supported. Refer to the [Go release
policy](https://go.dev/doc/devel/release).

For an example of how to update etcd to a new patch release of Go refer to issue <https://github.com/etcd-io/etcd/issues/16343> and the linked pull requests.

References:

- <https://github.com/kubernetes/sig-release/blob/master/release-engineering/handbooks/go.md>

Core dependencies mappings

[bbolt](https://github.com/etcd-io/bbolt) and [raft](https://github.com/etcd-io/raft) are two core dependencies of etcd.

Both etcd 3.4.x and 3.5.x depend on bbolt 1.3.x, and etcd 3.6.x (`main` branch) depends on bbolt 1.4.x.

raft is included in the etcd repository for release-3.4 and release-3.5 branches, so etcd 3.4.x and 3.5.x do not depend on any
external raft module. We moved raft into [a separate repository](https://github.com/etcd-io/raft) starting
 from 3.6 (`main` branch), and the first raft
release will be v3.6.0, so etcd 3.6.x will depend on raft 3.6.x.

Please see the table below:

etcd versions	bbolt versions	raft versions
3.4.x	v1.3.x	N/A

| 3.5.x | v1.3.x | N/A |
| 3.6.x | v1.4.x | v3.6.x |

1.149 x-sync 0.15.0

1.149.1 Available under license :

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1.150 hashicorp-consul-api 1.32.1

1.150.1 Available under license :

---
layout: api
page_title: License - Operator - HTTP API
description: |-
The /operator/license endpoint allows for retrieving the Consul
Enterprise License.

License - Operator HTTP API

<EnterpriseAlert />

The licensing functionality described here is available only in
[Consul Enterprise](https://www.hashicorp.com/products/consul/) version 1.1.0 and later.

Getting the Consul License

This endpoint gets information about the current license.

Method	Path	Produces
`GET`	`/operator/license`	`application/json`

The table below shows this endpoint's support for
[blocking queries](/consul/api-docs/features/blocking),
[consistency modes](/consul/api-docs/features/consistency),
[agent caching](/consul/api-docs/features/caching), and
[required ACLs](/consul/api-docs/api-structure#authentication).

| Blocking Queries | Consistency Modes | Agent Caching | ACL Required |
| ---------------
 | ----------------- | ------------- | ------------ |
| `NO` | `all` | `none` | `none` |

The corresponding CLI command is [`consul license get`](/consul/commands/license#get).

Query Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be retrieved.
 This will default to the datacenter of the agent serving the HTTP request.

Sample Request

```shell-session
$ curl \
   http://127.0.0.1:8500/v1/operator/license
```

Sample Response

```json
{
 "Valid": true,
 "License": {
   "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
   "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
```

```
  "installation_id": "*",
  "issue_time": "2018-05-21T20:03:35.911567355Z",
  "start_time": "2018-05-21T04:00:00Z",
  "expiration_time": "2019-05-22T03:59:59.999Z",
  "product": "consul",
  "flags": {
    "package": "premium"
  },
  "features": [
    "Automated Backups",
    "Automated Upgrades",

    "Enhanced Read Scalability",
    "Network Segments",
    "Redundancy Zone",
    "Advanced Network Federation"
  ],
  "temporary": false
 },
 "Warnings": []
}
```

Updating the Consul License

-> **Deprecated** This endpoint was removed in Consul v1.10.0 along with
the ability to manage the cluster's license via the API.

This endpoint updates the Consul license and returns some of the
license contents as well as any warning messages regarding its validity.

Method	Path	Produces
`PUT`	`/operator/license`	`application/json`

The table below shows this endpoint's support for
[blocking queries](/consul/api-docs/features/blocking),
[consistency modes](/consul/api-docs/features/consistency),
[agent caching](/consul/api-docs/features/caching), and
[required ACLs](/consul/api-docs/api-structure#authentication).

Blocking Queries	Consistency Modes	Agent Caching	ACL Required
`NO`	`none`	`none`	`operator:write`

The corresponding CLI command is [`consul license put`](/consul/commands/license#put).

Query Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be updated.
 This will default to the datacenter of the agent serving the HTTP request.

Sample Payload

The payload is the raw license blob.

Sample Request

```shell-session
$ curl \
   --request PUT \
   --data @consul.license \
   http://127.0.0.1:8500/v1/operator/license
```

Sample Response

```json
{
 "Valid": true,
 "License": {
   "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
   "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
   "installation_id": "*",
   "issue_time": "2018-05-21T20:03:35.911567355Z",
   "start_time": "2018-05-21T04:00:00Z",
   "expiration_time": "2019-05-22T03:59:59.999Z",
   "product":
 "consul",
   "flags": {
     "package": "premium"
   },
   "features": [
     "Automated Backups",
     "Automated Upgrades",
     "Enhanced Read Scalability",
     "Network Segments",
     "Redundancy Zone",
     "Advanced Network Federation"
   ],
   "temporary": false
 },
 "Warnings": []
}
```

Resetting the Consul License

-> **Deprecated** This endpoint was removed in Consul v1.10.0 along with
the ability to manage the cluster's license via the API.

This endpoint resets the Consul license to the license included in the Enterprise binary. If the included license is not valid, the replace will fail.

Method	Path	Produces
`DELETE`	`/operator/license`	`application/json`

The table below shows this endpoint's support for
[blocking queries](/consul/api-docs/features/blocking),
[consistency modes](/consul/api-docs/features/consistency),
[agent caching](/consul/api-docs/features/caching),
and
[required ACLs](/consul/api-docs/api-structure#authentication).

Blocking Queries	Consistency Modes	Agent Caching	ACL Required
`NO`	`none`	`none`	`operator:write`

The corresponding CLI command is [`consul license reset`](/consul/commands/license#reset).

Query Parameters

- `dc` `(string: "")` - Specifies the datacenter whose license should be updated.
This will default to the datacenter of the agent serving the HTTP request.

Sample Request

```shell-session
$ curl \
  --request DELETE \
  http://127.0.0.1:8500/v1/operator/license
```

Sample Response

```json
{
 "Valid": true,
 "License": {
   "license_id": "2afbf681-0d1a-0649-cb6c-333ec9f0989c",
   "customer_id": "0259271d-8ffc-e85e-0830-c0822c1f5f2b",
   "installation_id": "*",
```

```
  "issue_time": "2018-05-21T20:03:35.911567355Z",
  "start_time": "2018-05-21T04:00:00Z",
   "expiration_time": "2019-05-22T03:59:59.999Z",
  "product": "consul",
  "flags": {
    "package": "premium"
  },
  "features": [
    "Automated Backups",
    "Automated Upgrades",
    "Enhanced Read Scalability",
    "Network Segments",
    "Redundancy Zone",
    "Advanced Network Federation"
  ],
  "temporary": false
 },
 "Warnings": []
}
```

```
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

@import './skin';
@import './layout';
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

.consul-intention-permission-form {
 h2 {
   padding-top: 1.4em;
   margin-top: 0.2em;
   margin-bottom: 0.6em;
 }
 .consul-intention-permission-header-form {
   margin-top: 10px;
 }
 fieldset:nth-child(2) > div,
 .consul-intention-permission-header-form fieldset > div {
   display: grid;
   grid-template-columns: repeat(auto-fit, minmax(160px, 1fr));
   grid-gap: 12px;
 }
 fieldset:nth-child(2) > div label:last-child {
```

```
  grid-column: span 2;
 }
 .ember-basic-dropdown-trigger {
  padding: 5px;
 }
 .checkbox-group {
  flex-direction: column;
 }
}
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

@import './skin';
@import './layout';
.consul-intention-permission-list > ul > li {
 @extend %list-row-200;
}
.consul-intention-permission-list:not(.readonly) > ul > li {
 @extend %with-composite-row-intent;
}
.consul-intention-permission-list strong {
 @extend %pill-500;
}
.consul-intention-permission-list .intent-allow {
 @extend %pill-allow;
}
.consul-intention-permission-list .intent-deny {
 @extend %pill-deny;
}
```

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---
layout: docs
page_title: Enterprise License FAQ
description: >-
Review frequently asked questions (FAQs) about Consul Enterprise licenses to learn more about how licenses work, what happens when they expire, and how to get a trial license.

Frequently Asked Questions (FAQ)

This FAQ is for the license changes introduced in Consul Enterprise version 1.10.0.
Consul Enterprise automatically loads Consul licenses when the server agent starts.

Q: Can I get a quick summary of the Consul changes?

Starting with Consul Enterprise 1.10.0, the license enablement process is different.

HashiCorp Enterprise servers will no longer start without a license. Servers require licenses to be provided from either an environment variable or file.
If the license is missing, invalid, or expired, the server will immediately exit.
This check is part of the server boot-up process.

In previous versions of HashiCorp enterprise products, one server could distribute a license to other servers via the Raft protocol.
This will no longer work since each server must be able to find a valid license during the startup process.

Q: What are the upgrade requirements?

All customers on Consul Enterprise 1.8/1.9 must first upgrade their client and server agents to the latest patch release.
During the upgrade the license file must also be configured on client agents in an environment variable or file path, otherwise the Consul agents will fail to retrieve the license with a valid agent token.
The upgrade process varies if ACLs are enabled or disabled in the cluster.
Refer to the instructions on [upgrading to 1.10.x](/consul/docs/upgrading/instructions/upgrade-to-1-10-x) for details.

Q: Is there a tutorial available for the license configuration steps?

Please visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs).

Q: What resources are available?

The list below is a great starting point for learning more about the license changes introduced in Consul Enterprise 1.10.0+ent.

- [Consul Enterprise Upgrade Documentation](/consul/docs/enterprise/upgrades)

- [Consul License Documentation](/consul/docs/enterprise/license/overview)

- [License configuration values documentation](/consul/docs/enterprise/license/overview#binaries-without-built-in-licenses)

- [Install a HashiCorp Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs)

Q: Do these changes impact all customers/licenses?

The license changes introduced in 1.10.0 only affect Consul Enterprise.
This impacts customers that have an enterprise binary (trial or non-trial licenses) downloaded from https://releases.hashicorp.com.
The license changes do not impact customers with the baked-in licensed binaries. In a later release of Consul Enterprise, baked-in binaries will be deprecated.

Q: What is the product behavior change introduced by the licensing changes?

Starting with Consul Enterprise 1.10.0, a valid license is required on-disk (auto-loading) or as an environment variable for Consul Enterprise to successfully boot-up.
The in-storage license feature will not be supported starting with Consul Enterprise 1.10.0+ent. All Consul

Enterprise clusters using 1.10.0+ent must ensure that there is a valid license on-disk (auto-loaded) or as an environment variable.

Q: What is the impact on trial licenses due to this change? ((#q-what-is-the-impact-on-evaluation-licenses-due-to-this-change))

Consul Enterprise 1.10.0+ server agents require a valid license to start.
The license can be provided on disk (auto-loaded) or as an environment variable.
There is no longer a 6-hour trial period in which Consul Enterprise server agents
can operate without a license.

Q: Is there a grace period when licenses expire?

YesConsul will continue normal operation and can be restarted after license *expiration* as defined in [`expiration_time`](/consul/api-docs/operator/license#getting-the-consul-license).
As
license expiration is approached or passed, Consul will issue warnings in the system logs.

Consul will only cease operation after license *termination*, which occurs 10 years
after license expiration and is defined in
[`termination_time`](/consul/api-docs/operator/license#getting-the-consul-license).

~> **Starting with Consul 1.14, and patch releases 1.13.3 and 1.12.6, Consul will support non-terminating licenses**:
Please contact your support representative for more details on non-terminating licenses.
An expired license will not allow Consul versions released after the expiration date to run.
It will not be possible to upgrade to a new version of Consul released after license expiration.

Q: Does this affect client agents?

There are upgrade requirements that affect Consul Enterprise clients.
Please review the [upgrade requirements](#q-what-are-the-upgrade-requirements) documentation.

Q: Does this affect snapshot agents?

Same behavior as Consul clients.
See answer for [Does this affect client agents?](#q-does-this-affect-client-agents)

Q: What is the behavior if the license is missing?

Consul server agents will detect the absence of the license and immediately exit.

Consul client agents will attempt to retrieve the license from servers if certain conditions are met:

- ACLs are enabled.
- An ACL token is provided to the client agent.
- The client agents configuration contains `retry_join` addresses.
- The retry join addresses are addresses of the Consul servers.

Consul snapshot agents will attempt to retrieve the license from servers if certain conditions are met: ACLs are enabled, a ACL token is provided to the client agent, the client agents configuration contains `retry_join` addresses, the retry join addresses are addresses of the Consul servers.

Q: Where can users get a trial license for Consul Enterprise?

Contact your [HashiCorp Support contact](https://support.hashicorp.com/) for a development license.

~> **Trial
install will cease operation 24 hours after 30-day license expiration**:
Trial licenses are not meant to be used in production.
This is unlike non-trial licenses which provide a 10 year grace period as described in
the answer for [Q: Is there a grace period when licenses expire?](#q-is-there-a-grace-period-when-licenses-expire).

Q: How can I renew a license?

Contact your organization's [HashiCorp account team](https://support.hashicorp.com/hc/en-us) for information on how to renew your organization's enterprise license.

Q: I'm an existing enterprise customer but don't have my license, how can I get it?

Contact your organization's [HashiCorp account team](https://support.hashicorp.com/hc/en-us) for information on how to renew your organization's enterprise license.

Q: Are the license files locked to a specific cluster?

The license files are not locked to a specific cluster or cluster node. The above changes apply to all nodes in a cluster.

Q: Will this
impact HCP Consul Dedicated?

This will not impact HCP Consul Dedicated.

Q: Does this need to happen every time a node restarts, or is this a one-time check?

Consul Enterprise binaries starting with 1.10.0+ent, will be subject to EULA check. Release 1.10.0+ent introduces the EULA check for trial licenses (non-trial licenses already go through EULA check during contractual agreement).

The agreement to a EULA happens only once (when the user gets their license), Consul Enterprise **will check for the presence of a valid license every time a node restarts**.

When a customer upgrades existing clusters to a 1.10.0+ent release, they need to have a valid license to successfully upgrade. This valid license must be auto-loaded.

When a customer deploys new clusters to a 1.10.0+ent release, they need to have a valid license to successfully upgrade. This valid license must be on-disk (auto-loaded).

Q: What are the scenarios that a customer must plan for because of these changes?

New
 Consul cluster deployments using 1.10.0+ent will need to have a valid license on servers to successfully deploy. This valid license must be on-disk (auto-loaded) or as an environment variable.
Please see the [upgrade requirements](/consul/docs/enterprise/license/faq#q-what-are-the-upgrade-requirements).

Q: What is the migration path for customers who want to migrate from their existing license-as-applied-via-the-CLI flow to the license on disk flow?

VM

1. Run [`consul license get -signed`](/consul/commands/license#get) to extract the license from their running cluster. Store the license in a secure location on disk.
1. Set up the necessary configuration so that when Consul Enterprise reboots it will have access to the required license. This could be via the client agent configuration file or an environment variable.
1. Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license
 key.
1. Follow the Consul upgrade [documentation](/consul/docs/upgrading).

Kubernetes

NOTE: If you are not upgrading Consul or your Helm chart version then no action is required.

1. In order to use Consul Enterprise 1.10.0 or greater on Kubernetes you must use version 0.32.0 or greater of the Helm chart.
1. You should already have a Consul Enterprise license set as a Kubernetes secret. If you do not, refer to [how to obtain a copy of your license](/consul/docs/enterprise/license/faq#q-i-m-an-existing-enterprise-customer-but-don-t-have-my-license-how-can-i-get-it).
Once you have the license then create a Kubernetes secret containing the license as described in [Kubernetes - Consul Enterprise](/consul/docs/k8s/deployment-configurations/consul-enterprise).
1. Follow the [Kubernetes Upgrade Docs](/consul/docs/k8s/upgrade) to upgrade. No changes to your `values.yaml` file are needed to enable enterprise autoloading since this support is built in to consul-helm 0.32.0 and greater.

!>
 Warning: If you are upgrading the Helm chart but **not** upgrading the Consul version, you must set `server.enterpriseLicense.enableLicenseAutoload: false`. See [Kubernetes - Consul Enterprise](/consul/docs/k8s/deployment-configurations/consul-enterprise) for more details.

Q: What is the migration path for customers who want to migrate from their existing perpetually-licensed binaries to the license on disk flow?

VM

1. Acquire a valid Consul Enterprise license. If you are an existing HashiCorp enterprise customer you may contact your organization's [customer success manager](https://support.hashicorp.com/hc/en-us) (CSM) for information on

how to get your organization's enterprise license.
1. Store the license in a secure location on disk.
1. Set up the necessary configuration so that when Consul Enterprise reboots it will have the required license. This could be via the client agent configuration file or an environment variable.
  Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.
1. Follow the Consul upgrade [documentation](/consul/docs/upgrading).

Kubernetes

1. Acquire a valid Consul Enterprise license. If you are an existing HashiCorp enterprise customer you may contact your organization's [customer success manager](https://support.hashicorp.com/hc/en-us) (CSM) for information on how to get your organization's enterprise license.
1. Set up the necessary configuration so that when Consul Enterprise reboots it will have the required license. This could be via the client agent configuration file or an environment variable.
  Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.
1. Proceed with the `helm` [upgrade instructions](/consul/docs/k8s/upgrade)

Q: Will Consul downgrades/rollbacks work?

When downgrading
 to a version of Consul before 1.10.0+ent, customers will need to follow the previous process for applying an enterprise licenses to Consul Enterprise.

Q: Are there potential pitfalls when downgrading or upgrading Consul server instances?

~> Verify that you meet the [upgrade requirements](/consul/docs/enterprise/license/faq#q-what-are-the-upgrade-requirements).

Assume a scenario where there are three Consul server nodes:

- Node A: v1.9.5
- Node B: v1.10.0 [Leader]
- Node C: v1.9.5

The command `consul license put` is issued from Node A. This will result in an error due to how Consul routes calls to the server node, Node B in this example.
Because Node A is a follower when the call `consul license put` is issued, the call will be redirected to Node B (leader).
The `consul license put` operation will fail due to being removed from 1.10.0.
This is a scenario that could occur if a customer downgrades from 1.10.0+ and the Consul leadership has not transferred back over to a node
 not running 1.10.0+.
This also has the potential of occurring when upgrading if scheduled license updates or autoscaling groups recoveries are in place.

Q: Any impacts to Consul Kubernetes?

If you are using a Consul Enterprise version prior to 1.10.0 and decide to upgrade the Helm chart to version 0.32.0 or newer, but not the Consul version.
You will need to add the following configuration.

```
server:
 enterpriseLicense:
   enableLicenseAutoload: false
```
```
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

.consul-intention-permission-header-list {
 max-height: 200px;
 overflow: auto;
}
{{!
 Copyright (c) HashiCorp, Inc.
 SPDX-License-Identifier: BUSL-1.1
}}

{{#if (gt items.length 0)}}
<ListCollection
 class="consul-intention-permission-header-list"
 @items={{items}}
 @scroll="native"
 @cellHeight={{42}}
as |item|>
 <BlockSlot @name="details">
   <dl>
     <dt>
       <Tooltip>
         Header
       </Tooltip>
     </dt>
     <dd>
       {{item.Name}} {{route-match item}}
     </dd>
   </dl>
 </BlockSlot>
 <BlockSlot @name="actions" as |Actions|>
   <Actions as |Action|>
     <Action data-test-delete-action @onclick={{action ondelete item}} class="dangerous">
       <BlockSlot @name="label">
         Delete
```

```
      </BlockSlot>
      <BlockSlot @name="confirmation" as |Confirmation|>
        <Confirmation class="warning">
          <BlockSlot @name="header">
            Confirm delete
          </BlockSlot>
          <BlockSlot @name="body">
            <p>
              Are you sure you want to delete this header?

 </p>
          </BlockSlot>
          <BlockSlot @name="confirm" as |Confirm|>
            <Confirm>Delete</Confirm>
          </BlockSlot>
        </Confirmation>
      </BlockSlot>
    </Action>
  </Actions>
 </BlockSlot>
</ListCollection>
{{/if}}
{
 "name": "envoy.filters.http.rbac",
 "typedConfig": {
  "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
  "rules": {
    "policies": {
      "consul-intentions-layer7-0": {
        "permissions": [
          {
            "andRules": {
              "rules": [
                {
                  "urlPath": {
                    "path": {
                      "exact": "/v1/secret"
                    }
                  }
                },
                {
                  "andRules": {
                    "rules": [
                      {
                        "metadata": {
                          "filter": "envoy.filters.http.jwt_authn",
                          "path": [
                            {
```

```
                "key": "jwt_payload_auth0"
              },
              {
                "key": "iss"
              }
             ],
            "value": {
              "stringMatch": {
                "exact": "mytest.auth0-issuer"
              }
            }
           }
          },
          {
           "metadata": {
            "filter": "envoy.filters.http.jwt_authn",
            "path": [
              {
                "key": "jwt_payload_auth0"
              },
              {
                "key": "perms"
              },
              {
                "key": "role"
              }
            ],
            "value": {
              "stringMatch": {
                "exact": "admin"

 }
            }
           }
          }
         ]
        }
       }
   ]
 }
},
{
 "andRules": {
   "rules": [
     {
       "urlPath": {
         "path": {
           "exact": "/v1/admin"
```

```
          }
         }
        },
        {
         "notRule": {
          "urlPath": {
           "path": {
            "exact": "/v1/secret"
           }
          }
         }
        }
       ]
      }
     }
    ],
    "principals": [
     {
      "andIds": {
       "ids": [
        {
         "authenticated": {
          "principalName": {

         "safeRegex": {
              "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
            }
          }
         }
        },
        {
         "andIds": {
          "ids": [
           {
            "metadata": {
             "filter": "envoy.filters.http.jwt_authn",
             "path": [
              {
               "key": "jwt_payload_okta"
              },
              {
               "key": "iss"
              }
             ],
             "value": {
              "stringMatch": {
               "exact": "mytest.okta-issuer"
              }
```

```
                    }
                   }
                  },

                  {
                   "metadata": {
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                    "path": [
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                      "key": "jwt_payload_okta"
                     },
                     {
                      "key": "roles"
                     }
                    ],
                    "value": {
                     "stringMatch": {
                      "exact": "testing"
                     }
                    }
                   }
                  }
                 ]
                }
               }
              ]
             }
            }
           ]
          }
         }
        }
       }
      }
     }
    }
   }
  }
 }
}
{{!
 Copyright (c) HashiCorp, Inc.
 SPDX-License-Identifier: BUSL-1.1
}}

<div
 ...attributes
 class="consul-intention-permission-header-form"
>
 <FormGroup
   @name={{name}}
 as |group|>

   {{yield (hash
```

```
    submit=(action 'submit' changeset)
    reset=(action 'reset' changeset)

    isDirty=(and changeset.isValid changeset.isDirty)
    changeset=changeset
  )}}

  <fieldset>
    <div>
      <group.Element
        @name="HeaderType"
        @type="select"
      as |el|>
        <el.Label>Header type</el.Label>
        <PowerSelect
          @options={{headerTypes}}
          @selected={{headerType}}
          @onChange={{action 'change' 'HeaderType' changeset}} as |Type|>
            {{get headerLabels Type}}
        </PowerSelect>
      </group.Element>


      <group.Element
        @name="Name"
        @error={{changeset-get changeset 'error.Name'}}
      as |el|>
        <el.Label>Header name</el.Label>
        <el.Text

         @value={{changeset-get changeset 'Name'}}
          oninput={{action 'change' 'Name' changeset}}
        />
        <State @state={{el.state}} @matches="error">
          <el.Error>
            {{changeset-get changeset 'error.Name.validation'}}
          </el.Error>
        </State>
      </group.Element>

  {{#if shouldShowValueField}}
      <group.Element
        @name="Value"
        @error={{changeset-get changeset 'error.Value'}}
      as |el|>
        <el.Label>Header {{lowercase (get headerLabels headerType)}}</el.Label>
        <el.Text
          @value={{changeset-get changeset 'Value'}}
```

```
          oninput={{action 'change' 'Value' changeset}}
        />
        <State @state={{el.state}} @matches="error">
          <el.Error>
            {{changeset-get changeset 'error.Value.validation'}}
          </el.Error>
        </State>
      </group.Element>
{{/if}}

    </div>
  </fieldset>
</FormGroup>
</div>
{
 "name": "envoy.filters.http.rbac",
 "typedConfig": {
  "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
  "rules": {
   "policies": {
    "consul-intentions-layer7-0": {
     "permissions": [
      {
       "andRules": {
        "rules": [
         {
          "urlPath": {
           "path": {
            "prefix": "/v1"
           }
          }
         },
         {
          "notRule": {
           "urlPath": {
            "path": {
             "exact": "/v1/secret"
            }
           }
          }
         }
        ]
       }
      },
      {
       "andRules": {
        "rules": [
         {
```

```
        "andRules": {
         "rules": [
          {

        "urlPath": {
              "path": {
               "safeRegex": {
                "regex": "/v[123]"
               }
              }
             }
            },
            {
             "header": {
              "name": ":method",
              "stringMatch": {
               "safeRegex": {
                "regex": "GET|HEAD|OPTIONS"
               }
              }
             }
            }
           ]
          }
         },
         {
          "notRule": {
           "urlPath": {
            "path": {
             "exact": "/v1/secret"
            }
           }
          }
         },

{
         "notRule": {
          "andRules": {
           "rules": [
            {
             "urlPath": {
              "path": {
               "exact": "/v1/admin"
              }
             }
            },
            {
             "header": {
```

```
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                     }
                    }
                   }
                  }
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                }
               }
              }
             ]
            }
           },
           {
            "andRules": {
             "rules": [
              {

"andRules": {
                "rules": [
                 {
                  "header": {
                   "name": "x-foo",
                   "presentMatch": true
                  }
                 },
                 {
                  "header": {
                   "name": "x-bar",
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                    "exact": "xyz"
                   }
                  }
                 },
                 {
                  "header": {
                   "name": "x-dib",
                   "stringMatch": {
                    "prefix": "gaz"
                   }
                  }
                 },
                 {
                  "header": {
                   "name": "x-gir",
                   "stringMatch": {
```

```
"suffix": "zim"
          }
         }
        },
        {
         "header": {
          "name": "x-zim",
          "stringMatch": {
           "safeRegex": {
            "regex": "gi[rR]"
           }
          }
         }
        },
        {
         "header": {
          "invertMatch": true,
          "name": "z-foo",
          "presentMatch": true
         }
        },
        {
         "header": {
          "invertMatch": true,
          "name": "z-bar",
          "stringMatch": {
           "exact": "xyz"

    }
         }
        },
        {
         "header": {
          "invertMatch": true,
          "name": "z-dib",
          "stringMatch": {
           "prefix": "gaz"
          }
         }
        },
        {
         "header": {
          "invertMatch": true,
          "name": "z-gir",
          "stringMatch": {
           "suffix": "zim"
          }
```

```
            }
           },
           {
            "header": {
              "invertMatch": true,
              "name": "z-zim",
              "stringMatch": {
                "safeRegex": {

            "regex": "gi[rR]"
                }
              }
            }
           }
          ]
         }
        },
        {
         "notRule": {
          "urlPath": {
           "path": {
            "exact": "/v1/secret"
           }
          }
         }
        },
        {
         "notRule": {
          "header": {
           "name": "x-baz",
           "presentMatch": true
          }
         }
        }
      ]
    }
  }
],
"principals": [
  {
    "authenticated": {
      "principalName": {
        "safeRegex": {
          "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
        }
      }
    }
  }
```

```
        ]
       }
      }
     }
    }
   }
}
{
 "name": "envoy.filters.network.rbac",
 "typedConfig": {
  "@type": "type.googleapis.com/envoy.extensions.filters.network.rbac.v3.RBAC",
  "rules": {},
  "statPrefix": "connect_authz"
 }
}
{
 "Valid": true,
 "License": {
  "license_id": "${fake.random.uuid()}",
  "customer_id": "${fake.random.uuid()}",
  "installation_id": "*",
  "issue_time": "2021-01-13T15:25:19.052900132Z",
  "start_time": "2021-01-13T00:00:00Z",
  "expiration_time": "${env('CONSUL_LICENSE_EXPIRATION', '2022-05-02T23:59:59.999Z')}",
  "termination_time": "${env('CONSUL_LICENSE_TERMINATION', '2022-01-13T23:59:59.999Z')}",
  "product": "consul",
  "flags": {
   "modules": [
    "global-visibility-routing-scale",
    "governance-policy"
   ]
  },
  "modules": [
   "Global Visibility, Routing and Scale",
   "Governance and Policy"
  ],
  "features": [
   "Automated Backups",
   "Automated Upgrades",
   "Enhanced Read Scalability",
   "Network Segments",
   "Redundancy Zone",
   "Advanced Network Federation",
   "Namespaces",
   "SSO",
   "Audit Logging",
   "Admin Partitions"
  ]
 },
```

```
 "Warnings": [
 ]
}
{
 "name": "envoy.filters.http.jwt_authn",
 "typedConfig": {
  "@type": "type.googleapis.com/envoy.extensions.filters.http.jwt_authn.v3.JwtAuthentication",
  "providers": {
   "okta": {
    "issuer": "test-issuer",
    "payloadInMetadata": "jwt_payload_okta",
    "remoteJwks": {
     "asyncFetch": {
      "fastListener": true
     },
     "httpUri": {
      "cluster": "jwks_cluster_okta",
      "timeout": "1s",
      "uri": "https://example-okta.com/.well-known/jwks.json"
     }
    }
   }
  },
  "rules": [
   {
    "match": {
     "prefix": "/"
    },
    "requires": {
     "requiresAny": {
      "requirements": [
       {
        "providerName": "okta"
       },
       {
        "allowMissingOrFailed": {}
       }
      ]
     }
    }
   }
  ]
 }
}
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/
```

```
@import './skin';
@import './layout';
.consul-intention-permission-header-list {
 > ul > li {
   @extend %list-row-200;
 }
}
```

```
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the design is owned solely by HashiCorp, Inc.
```

```
{
 "name": "envoy.filters.http.rbac",
 "typedConfig": {
   "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
   "rules": {
     "policies": {
       "consul-intentions-layer7-0": {
         "permissions": [
           {
             "andRules": {
               "rules": [
                 {
                   "andRules": {
                     "rules": [
                       {
                         "urlPath": {
                           "path": {
                             "prefix": "/v1"
                           }
                         }
                       },
                       {
                         "header": {
                           "name": "x-foo",
                           "presentMatch": true
                         }
                       }
                     ]
                   }
                 },
```

```
        {
          "notRule": {
            "andRules": {

            "rules": [
               {
                "urlPath": {
                  "path": {
                    "exact": "/v1/secret"
                  }
                }
               },
               {
                "header": {
                  "name": "x-baz",
                  "presentMatch": true
                }
               },
               {
                "header": {
                  "name": "x-bar",
                  "presentMatch": true
                }
               }
             ]
            }
          }
        },
        {
          "notRule": {
            "andRules": {
              "rules": [
                {

"urlPath": {
                  "path": {
                    "exact": "/v1/admin"
                  }
                }
               },
               {
                "header": {
                  "name": "x-baz",
                  "presentMatch": true
                }
               },
               {
                "header": {
```

```
                        "name": "x-bar",
                        "presentMatch": true
                      }
                     }
                    ]
                   }
                  }
                 }
                ]
               }
              }
             ],
             "principals": [
              {
               "authenticated": {
                "principalName": {
                 "safeRegex": {
                  "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
                 }
                }
               }
              }
             ]
            }
           }
          }
         }
        }
        # License

        ```hbs preview-template
        <figure>
         <figcaption>URI: <code>/:partition/:nspace/:dc/license</code></figcaption>
         <DataSource
          @src={{
           uri '/${partition}/${nspace}/${dc}/license'
           (hash
            partition='partition'
            nspace='ns'
            dc='dc-1'
           )
          }}
          @onchange={{action (mut data) value="data"}}
         />
         <pre><code>{{json-stringify data null 4}}</code></pre>
        </figure>
        ```
```

---
page_title: Automated license utilization reporting
description: >-
Learn what data HashiCorp collects to meter Enterprise license utilization. Enable or disable reporting. Review sample payloads and logs.

Automated license utilization reporting

This topic describes how to enable automated license utilization reporting in Consul Enterprise. This feature automatically sends license utilization data to HashiCorp so that you do not have to manually collect and report it. It also enables you to review your license usage with the monitoring solution you already use, such as Splunk and Datadog, as you optimize and manage your deployments.

Introduction

You can use automated license utilization report to understand how much additional networking infrastructure you can deploy under your current contract. This feature helps you protect against overutilization and budget for predicted consumption.

Automated reporting shares the minimum data required to validate license utilization
as defined in our contracts. This data mostly consists of computed metrics, and it will never contain Personal Identifiable Information (PII) or other sensitive information. Automated reporting shares the data with HashiCorp using a secure unidirectional HTTPS API and makes an auditable record in the product logs each time it submits a report. This process is GDPR-compliant.

Requirements

Automated license utilization reporting does not support _air-gapped installations_, which are systems with no network interfaces.

The following versions of Consul Enterprise support automated license utilization reporting:

- Consul Enterprise v1.16.0 and newer.
- Patch releases of Consul Enterprise v1.15.4 and newer.
- Patch releases of Consul Enterprise v1.14.8 and newer.
- Patch releases of Consul Enterprise v1.13.9 and newer.

Download a supported release from the [Consul Versions](https://releases.hashicorp.com/consul/) page.

Enable automated reporting

Before you enable automated reporting,
make sure that outbound network traffic is configured correctly and upgrade your enterprise product to a version that supports it. If your installation is air-gapped or network settings are not in place, automated reporting will not work.

To enable automated reporting, complete the following steps:

1. [Allow outbound HTTPS traffic on port 443](#allow-outbound-https-traffic)
1. [Check product logs](#check-product-logs)

Allow outbound HTTPS traffic on port 443

Make sure that your network allows HTTPS egress on port 443 from `https://reporting.hashicorp.services` by adding the following IP addresses to your allow-list:

- `100.20.70.12`
- `35.166.5.222`
- `23.95.85.111`
- `44.215.244.1`

Check product logs

Automatic license utilization reporting starts sending data within roughly 24 hours. Check the product logs for records that the data sent successfully.

<CodeBlockConfig hideClipboard>

```
[DEBUG] beginning snapshot export
[DEBUG] creating payload
[DEBUG] marshalling
 payload to json
[DEBUG] generating authentication headers
[DEBUG] creating request
[DEBUG] sending request
[DEBUG] performing request: method=POST url=https://census.license.hashicorp.services
[DEBUG] recording audit record
[INFO]  reporting: Report sent: auditRecord={"payload":{"payload_version":"1","license_id":"d2cdd857-4202-5a45-70a6-e4b531050c34","product":"consul","product_version":"1.16.0-dev+ent","export_timestamp":"2023-05-26T20:09:13.753921087Z","snapshots":[{"snapshot_version":1,"snapshot_id":"0001J724F90F4XWQDSAA76ZQWA","process_id":"01H1CTJPC1S8H7Q45MKTJ689ZW","timestamp":"2023-05-26T20:09:13.753513962Z","schema_version":"1.0.0","service":"consul","metrics":{"consul.billable.nodes":{"key":"consul.billable.nodes","kind":"counter","mode":"write","value":2},"consul.billable.service_instances":{"key":"consul.billable.service_instances","kind":"counter","mode":"write","value":2}}}],"metadata":{}}}
[DEBUG] completed recording audit record
[DEBUG] export finished successfully"
```

</CodeBlockConfig>

If
 your installation is air-gapped or your network does not allow the correct egress, the logs show an error.

<CodeBlockConfig hideClipboard>

```
[DEBUG] reporting: beginning snapshot export
[DEBUG] reporting: creating payload
[DEBUG] reporting: marshalling payload to json
[DEBUG] reporting: generating authentication headers
[DEBUG] reporting: creating request
[DEBUG] reporting: sending request
[DEBUG] reporting: performing request: method=POST url=https://census.license.hashicorp.services
[DEBUG] reporting: error status code received: statusCode=403
```

</CodeBlockConfig>

In this case, reconfigure your network to allow egress and check the logs again in roughly 24 hours to confirm that automated reporting works correctly.

Opt out

If your installation is air-gapped or you want to manually collect and report on the same license utilization metrics, you can opt out of automated reporting.

Manually reporting these metrics can be time consuming. Opting
 out of automated reporting does not mean that you also opt out from sending license utilization metrics. Customers who opt out of automated reporting are still required to manually collect and send license utilization metrics to HashiCorp.

If you are considering opting out because you are worried about the data, we strongly recommend that you review the [example payloads](#example-payloads) before opting out. If you have concerns with any of the automatically reported data, raise these concerns with your account manager.

There are two methods for opting out of automated reporting:

- HCL configuration (recommended)
- Environment variable (requires restart)

We recommend opting out in your product's configuration file because it does not require a system restart. Add the following block to your `configuration.hcl` or `configuration.json` file.

```hcl
reporting {
 license {
  enabled = false
 }
}
```

When opting out using an environment variable, the system provides a startup message

confirming that you have disabled automated reporting. Set the following environment variable to disable automated reporting:

<CodeBlockConfig>

```shell-session
$ export OPTOUT_LICENSE_REPORTING=true
```

</CodeBlockConfig>

After you set the environment variable, restart your system to complete the process for opting out.

```shell-session
$ consul reload
```

Check your product logs roughly 24 hours after opting out to make sure that the system is not trying to send reports. Keep in mind that if your configuration file and environment variable differ, the environment variable setting takes precedence.

Example payloads

HashiCorp collects the following utilization data as JSON payloads:
`exporter_version` - The version of the licensing exporter

<CodeBlockConfig hideClipboard>

```json
{
 "payload": {
   "payload_version": "1",
   "license_id": "d2cdd857-4202-5a45-70a6-e4b531050c34",
   "product": "consul",
   "product_version": "1.16.0-dev+ent",
   "export_timestamp":
 "2023-05-26T20:09:13.753921087Z",
   "snapshots": [
     {
       "snapshot_version": 1,
       "snapshot_id": "0001J724F90F4XWQDSAA76ZQWA",
       "process_id": "01H1CTJPC1S8H7Q45MKTJ689ZW",
       "timestamp": "2023-05-26T20:09:13.753513962Z",
       "schema_version": "1.0.0",
       "service": "consul",
       "metrics": {
         "consul.billable.nodes": {
```

```
          "key": "consul.billable.nodes",
          "kind": "counter",
          "mode": "write",
          "value": 2
        },
        "consul.billable.service_instances": {
          "key": "consul.billable.service_instances",
          "kind": "counter",
          "mode": "write",
          "value": 2
        }
      }
    }
  ],
  "metadata": {}
 }
}
```

</CodeBlockConfig>
---
layout: docs
page_title: Storing the Enterprise License in Vault
description: >-
 Configuring the Consul Helm chart to use an enterprise license stored in Vault.

Storing the Enterprise License in Vault

This topic describes how to configure the Consul Helm chart to use an enterprise license stored in Vault.
Overview
Complete the steps outlined in the [Data Integration](/consul/docs/k8s/deployment-configurations/vault/data-integration) section to use an enterprise license stored in Vault.

Complete the following steps once:
 1. Store the secret in Vault.
 1. Create a Vault policy that authorizes the desired level of access to the secret.

Repeat the following steps for each datacenter in the cluster:
 1. Create Vault Kubernetes auth roles that link the policy to each Consul on Kubernetes service account that requires access.
 1. Update the Consul on Kubernetes helm chart.

Prerequisites
Prior to setting up the data integration between Vault and Consul on Kubernetes,
 you will need to have:
1. Read and completed the steps in the [Systems Integration](/consul/docs/k8s/deployment-configurations/vault/systems-integration) section of [Vault as a Secrets Backend](/consul/docs/k8s/deployment-

configurations/vault).
2. Read the [Data Integration Overview](/consul/docs/k8s/deployment-configurations/vault/data-integration) section of [Vault as a Secrets Backend](/consul/docs/k8s/deployment-configurations/vault).

Store the Secret in Vault

First, store the enterprise license in Vault:

```shell-session
$ vault kv put consul-kv/secret/enterpriselicense key="<enterprise license>"
```

Create Vault policy

Next, you will need to create a policy that allows read access to this secret.

The path to the secret referenced in the `path` resource is the same value that you will configure in the `global.enterpriseLicense.secretName` Helm configuration (refer to [Update Consul on Kubernetes Helm chart](#update-consul-on-kubernetes-helm-chart)).

<CodeBlockConfig
 filename="license-policy.hcl">

```HCL
path "consul-kv/data/secret/enterpriselicense" {
 capabilities = ["read"]
}
```

</CodeBlockConfig>

Apply the Vault policy by issuing the `vault policy write` CLI command:

```shell-session
$ vault policy write license-policy license-policy.hcl
```

Create Vault Authorization Roles for Consul

Next, you will create Kubernetes auth roles for the Consul server and client:

```shell-session
$ vault write auth/kubernetes/role/consul-server \
   bound_service_account_names=<Consul server service account> \
   bound_service_account_namespaces=<Consul installation namespace> \
   policies=license-policy \
   ttl=1h
```

```shell-session
$ vault write auth/kubernetes/role/consul-client \
  bound_service_account_names=<Consul client service account> \
  bound_service_account_namespaces=<Consul installation namespace> \
  policies=license-policy \
  ttl=1h
```

To find out the service account names of the Consul server and client,
you can
 run the following `helm template` commands with your Consul on Kubernetes values file:

- Generate Consul server service account name
 ```shell-session
 $ helm template --release-name ${RELEASE_NAME} -s templates/server-serviceaccount.yaml hashicorp/consul -f values.yaml
 ```

- Generate Consul client service account name
 ```shell-session
 $ helm template --release-name ${RELEASE_NAME} -s templates/client-serviceaccount.yaml hashicorp/consul -f values.yaml
 ```

Update Consul on Kubernetes Helm chart.

Now that you have configured Vault, you can configure the Consul Helm chart to
use the enterprise enterprise license in Vault:

<CodeBlockConfig filename="values.yaml">

```yaml
global:
 image: hashicorp/consul-enterprise:1.12.0-ent
 secretsBackend:
   vault:
     enabled: true
     consulServerRole: consul-server
     consulClientRole: consul-client
 enterpriseLicense:
   secretName: consul-kv/data/secret/enterpriselicense
   secretKey: key
```

</CodeBlockConfig>

Note

```
 that `global.enterpriseLicense.secretName` is the path of the secret in Vault.
This should be the same path as the one you included in your Vault policy.
`global.enterpriseLicense.secretKey` is the key inside the secret data. This should be the same
as the key you passed when creating the enterprise license secret in Vault.
{{!
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}}

<Hds::Alert @type='inline' @color={{or @type "neutral"}} class='mb-2 mt-2 consul-intention-notice-custom-resource' as |A|>
 <A.Title>Intention Custom Resource</A.Title>
 <A.Description>Some of your intentions are being managed through an Intention Custom Resource in your Kubernetes cluster. Those managed intentions will be view only in the UI. Any intentions created in the UI will work but will not be synced to the Custom Resource Definition (CRD) datastore.</A.Description>
 <A.Link::Standalone @href="{{env 'CONSUL_DOCS_URL'}}/k8s/crds"
                    @text='Learn more about CRDs'
                    @icon="docs-link"
                    @iconPosition="trailing"
                    @size="small" />
</Hds::Alert>
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

.consul-intention-permission-form {
 h2 {
   border-top: 1px solid var(--token-color-foreground-action);
   @extend %display-400-semibold;
 }
 button.type-submit {
   @extend %frame-blue-300;
 }
 button.type-submit:hover:not(:disabled),
 button.type-submit:focus:not(:disabled) {
   @extend %frame-blue-500;
 }
 button.type-submit:disabled {
   @extend %frame-blue-200;
 }
}

.consul-intention-view {
 h2 {
   @extend %display-400-semibold;
 }
}
```

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---
layout: docs
page_title: Consul-Terraform-Sync Enterprise License
description: >-
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</EnterpriseAlert>

CTS Enterprise binaries require a [Consul Enterprise license](/consul/docs/enterprise/license/overview) to run. There is no CTS Enterprise specific license. As a result, CTS Enterprise's licensing is very similar to Consul Enterprise.

All CTS Enterprise features are available with a valid Consul Enterprise license, regardless of your Consul Enterprise packaging or pricing model.

To get a trial license for CTS, you can sign-up for the [trial license for Consul Enterprise](/consul/docs/enterprise/license/faq#q-where-can-users-get-a-trial-license-for-consul-enterprise).

Automatic License Retrieval
CTS automatically retrieves a license from Consul on startup and then attempts to retrieve a new license once a day. If the current license is reaching its expiration date, CTS attempts to retrieve a license with increased frequency, as defined by the [License Expiration Date Handling](/consul/docs/nia/enterprise/license#license-expiration-handling).

~> Enabling automatic license retrieval is recommended when using HCP Consul Dedicated, as HCP Consul Dedicated licenses expire more frequently than Consul Enterprise licenses. Without auto-retrieval enabled, you have to restart CTS every time you load a new license.

Setting the License Manually

If a license needs to be manually set, choose one of the following methods (in order of precedence) to set the license:

1. Set the `CONSUL_LICENSE` environment variable to the license string.

```shell-session
export CONSUL_LICENSE=<LICENSE_VALUE>
```

1. Set the `CONSUL_LICENSE_PATH` environment variable to the path of the file containing the license.

```shell-session
export CONSUL_LICENSE_PATH=<PATH>/<TO>/<FILE>
```

1. To point to the file containing the license, in the configuration file, configure the [`license`](/consul/docs/nia/configuration#license) path option.

```hcl
```

```
license {
  path = "<PATH>/<TO>/<FILE>"
}
```

1. To point to the file containing the license, in the configuration file, configure the [`license_path`](/consul/docs/nia/configuration#license_path) option i. **Deprecated in CTS 0.6.0 and will be removed in a future release. Use [license block](/consul/docs/nia/configuration#license) instead.**

```hcl
license_path = "<PATH>/<TO>/<FILE>"
```

~> **Note**: the [options to set the license and the order of precedence](/consul/docs/enterprise/license/overview#binaries-without-built-in-licenses) are the same as Consul Enterprise server agents.
Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.

Updating the License Manually
To update the license
when it expires or is near the expiration date and automatic license retrieval is disabled:

1. Update the license environment variable or configuration with the new license value or path to the new license file
1. Stop and restart CTS Enterprise

Once CTS Enterprise starts again, it will pick up the new license and run the tasks with any changes that may have occurred between the stop and restart period.

License Expiration Handling

Licenses have an expiration date and a termination date. The termination date is a time at or after the license expires. CTS Enterprise will cease to function once the termination date has passed.

The time between the expiration and termination dates is a grace period. Grace periods are generally 24-hours, but you should refer to your license agreement for complete terms of your grace period.

When approaching expiration and termination, by default, CTS Enterprise will attempt to retrieve a new license. If auto-retrieval is disabled, CTS Enterprise will
provide notifications in the system logs:

Time period	Behavior - auto-retrieval enabled (default)	Behavior - auto-retrieval disabled
30 days before expiration	License retrieval attempt every 24-hours	Warning-level log every 24-hours
7 days before expiration	License retrieval attempt every 1 hour	Warning-level log every 1 hour
1 day before expiration	License retrieval attempt every 5 minutes	Warning-level log every 5

```
minutes |
| 1 hour before expiration                  | License retrieval attempt every 1 minute    | Warning-level log every 1 minute
|
| At or after expiration (before termination) | License retrieval attempt every 1 minute    | Error-level log every 1
minute    |
| At or after termination
   | Error-level log and exit                  | Error-level log and exit          |

~> **Note**: Notification frequency and [grace period](/consul/docs/enterprise/license/faq#q-is-there-a-grace-
period-when-licenses-expire) behavior is the same as Consul Enterprise.
{{!
 Copyright (c) HashiCorp, Inc.
 SPDX-License-Identifier: BUSL-1.1
}}

{{#if (gt items.length 0)}}
<ListCollection
 class="consul-intention-permission-list{{if (not onclick) ' readonly'}}"
 @scroll="native"
 @items={{items}}
 @partial={{5}}
as |item|>
 <BlockSlot @name="details">
   <div onclick={{action (optional onclick) item}}>
     <strong class={{concat 'intent-' item.Action}}>{{capitalize item.Action}}</strong>
{{#if (gt item.HTTP.Methods.length 0)}}
       <dl class="permission-methods">
         <dt>
           <Tooltip>
             Methods
           </Tooltip>
         </dt>
         <dd>
{{#each item.HTTP.Methods as |item|}}
           {{item}}
{{/each}}
         </dd>
       </dl>
{{/if}}
{{#if item.HTTP.Path}}
       <dl class="permission-path">
         <dt>
           <Tooltip>
             {{item.HTTP.PathType}}
           </Tooltip>
         </dt>
         <dd>
           {{item.HTTP.Path}}
```

```
        </dd>
      </dl>
{{/if}}
{{#each item.HTTP.Header
 as |item|}}
      <dl class="permission-header">
        <dt>
          <Tooltip>
            Header
          </Tooltip>
        </dt>
        <dd>
          {{item.Name}} {{route-match item}}
        </dd>
      </dl>
{{/each}}
  </div>
 </BlockSlot>
{{#if onclick}}
 <BlockSlot @name="actions" as |Actions|>
  <Actions as |Action|>
    <Action data-test-edit-action @onclick={{action (optional onclick) item}} @close={{true}}>
      <BlockSlot @name="label">
        Edit
      </BlockSlot>
    </Action>
    <Action data-test-delete-action @onclick={{action ondelete item}} class="dangerous">
      <BlockSlot @name="label">
        Delete
      </BlockSlot>
      <BlockSlot @name="confirmation" as |Confirmation|>
        <Confirmation class="warning">
          <BlockSlot @name="header">
            Confirm delete
          </BlockSlot>
          <BlockSlot @name="body">
            <p>
              Are you sure you
 want to delete this permission?
            </p>
          </BlockSlot>
          <BlockSlot @name="confirm" as |Confirm|>
            <Confirm>Delete</Confirm>
          </BlockSlot>
        </Confirmation>
      </BlockSlot>
    </Action>
  </Actions>
```

</BlockSlot>
{{/if}}
</ListCollection>
{{/if}}
/*!
* clipboard.js v2.0.11
* https://clipboardjs.com/
*
* Licensed MIT Zeno Rocha
*/

/*!
* focus-trap 6.9.4
* @license MIT, https://github.com/focus-trap/focus-trap/blob/master/LICENSE
*/

/*! ***
Copyright (c) Microsoft Corporation.

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purpose with or without fee is hereby granted.

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REGARD TO THIS SOFTWARE INCLUDING ALL IMPLIED WARRANTIES OF MERCHANTABILITY
AND FITNESS. IN NO EVENT SHALL THE AUTHOR BE LIABLE FOR ANY SPECIAL, DIRECT,
INDIRECT, OR CONSEQUENTIAL DAMAGES OR ANY DAMAGES WHATSOEVER RESULTING FROM
LOSS OF USE, DATA OR PROFITS, WHETHER IN AN ACTION OF CONTRACT, NEGLIGENCE OR
OTHER TORTIOUS ACTION, ARISING OUT OF OR IN CONNECTION WITH THE USE OR
PERFORMANCE OF THIS SOFTWARE.
*** */

/**
* @license
* Copyright 2017 Google LLC
* SPDX-License-Identifier: BSD-3-Clause
*/

/**
* @license
* Copyright 2019 Google LLC
* SPDX-License-Identifier: BSD-3-Clause
*/
---
layout: commands
page_title: 'Commands: License'
description: >
 The license command provides a datacenter-level view of the Consul

Enterprise license.

Consul License

Command: `consul license`

<EnterpriseAlert />

The `license` command provides a list of all datacenters that use the Consul Enterprise license applied to the current datacenter.

~> **Warning**: Consul 1.10.0 removed the ability to set and reset the license using the CLI.
See the [licensing documentation](/consul/docs/enterprise/license/overview) for more information about
Consul Enterprise license management.

If ACLs are enabled then a token with operator privileges may be required in
order to use this command. Requests are forwarded internally to the leader
if required, so this can be run from any Consul node in a cluster. See the
[ACL Guide](/consul/tutorials/security/access-control-setup-production) for more information.

```text
Usage: consul license <subcommand> [options] [args]

 This command has subcommands
 for managing the Consul Enterprise license
 Here are some simple examples, and more detailed examples are
 available in the subcommands or the documentation.

 Install a new license from a file:

    $ consul license put @consul.license

 Install a new license from stdin:

    $ consul license put -

 Install a new license from a string:

    $ consul license put "<license blob>"

 Retrieve the current license:

    $ consul license get

 Inspect a license:

    $ consul license inspect "<path to license file>"
```

Reset the current license:

    $ consul license reset

For more examples, ask for subcommand help or view the documentation.

Subcommands:
  get   Get the active license
  inspect   Inspect a signed license
  put   Puts a new license in the datacenter
  reset   Resets the license in the datacenter

```

## inspect

This command inspects and validates a license. Just like a Consul agent it
can load the license from a file
 on disk or from the `CONSUL_LICENSE` and
`CONSUL_LICENSE_PATH` environment variables.

Usage: `consul license inspect [<options>] [<license file>]`

Inspect a license contained in a file:

```
$ consul license inspect consul.hclic
```

Inspect a license loaded from the environment:

```
$ consul license inspect
```

This will look at the CONSUL_LICENSE environment variable first
and if not present then we will look for the file specified
by the CONSUL_LICENSE_PATH environment variable.

The output looks like this:

```
Source: /consul/config/consul.hclic (path from the CONSUL_LICENSE_PATH environment variable)
Product: consul
License ID: 6089174b-a713-74cf-4c8d-856b86f1ce50
Customer ID: 7c020610-60a2-7ccb-c210-20d899e5f3b4
Installation ID: *
```
```

Issue Time: 2020-09-14 19:45:56.212195875 +0000 UTC
Start Time: 2020-09-14 00:00:00 +0000 UTC
Expiration Time: 2021-09-14 23:59:59.999 +0000 UTC
Termination Time: 2021-09-14 23:59:59.999 +0000 UTC
Modules:
    Global Visibility, Routing and Scale
     Governance and Policy
Features:
    Automated Backups
    Automated Upgrades
    Enhanced Read Scalability
    Network Segments
    Redundancy Zone
    Advanced Network Federation
    Namespaces
    SSO
    Audit Logging
    Admin Partitions

License is valid

```

## put

-> **Deprecated** The ability to manage the cluster's license via the CLI
was removed in Consul 1.10. While the CLI command still exists it will
always return an error. This command will be fully removed in a future release.

Corresponding HTTP API Endpoint: [\[PUT\] /v1/operator/license](/consul/api-docs/operator/license#updating-the-consul-license)

This command sets the Consul Enterprise license.

The table below shows this command's [required ACLs](/consul/api-docs/api-structure#authentication).
Configuration of
[blocking queries](/consul/api-docs/features/blocking) and [agent caching](/consul/api-docs/features/caching)
are not supported from commands, but may be
 from the corresponding HTTP endpoint.

| ACL Required     |
| ---------------- |
| `operator:write` |

Usage: `consul license put [options] LICENSE`

The output looks like this:
```

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffc-e85e-0830-c0822c1f5f2b
Expires At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
    Automated Backups
    Automated Upgrades
    Enhanced Read Scalability
    Network Segments
    Redundancy Zone
    Advanced Network Federation
```

API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'

get

Corresponding HTTP API Endpoint: [\[GET\] /v1/operator/license](/consul/api-docs/operator/license#getting-the-consul-license)

This command gets the Consul Enterprise license. If the leader hasn't been updated with the newer license, the followers
will display the outdated license in their GET output.

The table below
 shows this command's [required ACLs](/consul/api-docs/api-structure#authentication). Configuration of [blocking queries](/consul/api-docs/features/blocking) and [agent caching](/consul/api-docs/features/caching) are not supported from commands, but may be from the corresponding HTTP endpoint.

ACL Required
`none`

Usage: `consul license get [options]`

The output looks like this:

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffc-e85e-0830-c0822c1f5f2b
```

Expires At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
    Automated Backups
    Automated Upgrades
    Enhanced Read Scalability
    Network Segments
    Redundancy Zone
    Advanced Network Federation
```

#### API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'

## reset

-> **Deprecated** The ability to manage the cluster's license via the CLI
was
 removed in Consul 1.10. While the CLI command still exists it will
always return an error. This command will be fully removed in a future release.

Corresponding HTTP API Endpoint: [\[DELETE\] /v1/operator/license](/consul/api-docs/operator/license#resetting-the-consul-license)

Resets license for the datacenter to the one builtin in Consul binary, if it is still valid.
If the builtin license is invalid, the current one stays active.

The table below shows this command's [required ACLs](/consul/api-docs/api-structure#authentication).
Configuration of
[blocking queries](/consul/api-docs/features/blocking) and [agent caching](/consul/api-docs/features/caching)
are not supported from commands, but may be from the corresponding HTTP endpoint.

| ACL Required     |
| ---------------- |
| `operator:write` |

Usage: `consul license reset [options]`

The output looks like this:

```text
License is valid
License ID: 2afbf681-0d1a-0649-cb6c-333ec9f0989c
Customer ID: 0259271d-8ffc-e85e-0830-c0822c1f5f2b
```
```

```
Expires
 At: 2019-05-22 03:59:59.999 +0000 UTC
Datacenter: *
Package: premium
Licensed Features:
      Automated Backups
      Automated Upgrades
      Enhanced Read Scalability
      Network Segments
      Redundancy Zone
      Advanced Network Federation
```

API Options

@include 'http_api_options_client.mdx'

@include 'http_api_options_server.mdx'

```
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

.agentless-node-notice .hds-alert__title {
 display: flex;
 justify-content: space-between;
}
Mozilla Public License 2.0 (MPLv2.0)
{
 "name": "envoy.filters.http.rbac",
 "typedConfig": {
   "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
   "rules": {
     "policies": {
       "consul-intentions-layer7-0": {
         "permissions": [
           {
             "andRules": {
               "rules": [
                 {
                   "andRules": {
                     "rules": [
                       {
                         "urlPath": {
                           "path": {
                             "prefix": "/v1"
                           }
                         }
```

```
        },
        {
          "header": {
            "name": "x-foo",
            "presentMatch": true
          }
        }
      ]
    }
  },
  {
    "notRule": {
      "andRules": {

      "rules": [
        {
          "urlPath": {
            "path": {
              "exact": "/v1/secret"
            }
          }
        },
        {
          "header": {
            "name": "x-baz",
            "presentMatch": true
          }
        },
        {
          "header": {
            "name": "x-bar",
            "presentMatch": true
          }
        }
      ]
    }
  }
  },
  {
    "notRule": {
      "andRules": {
        "rules": [
          {

"urlPath": {
            "path": {
              "exact": "/v1/admin"
            }
```

```
                }
               },
               {
                "header": {
                 "name": "x-baz",
                 "presentMatch": true
                }
               },
               {
                "header": {
                 "name": "x-bar",
                 "presentMatch": true
                }
               }
              ]
             }
            }
           }
          ]
         }
        },
        {
         "andRules": {
          "rules": [
           {
            "andRules": {
             "rules": [
              {

"urlPath": {
                "path": {
                 "prefix": "/v2"
                }
               }
              },
              {
               "header": {
                "name": "x-foo",
                "presentMatch": true
               }
              }
             ]
            }
           },
           {
            "notRule": {
             "andRules": {
              "rules": [
```

```
                {
                 "urlPath": {
                  "path": {
                   "exact": "/v2/secret"
                  }
                 }
                },
                {
                 "header": {
                  "name": "x-baz",
                  "presentMatch":
true
                 }
                },
                {
                 "header": {
                  "name": "x-bar",
                  "presentMatch": true
                 }
                }
               ]
              }
             }
            },
            {
             "notRule": {
              "andRules": {
               "rules": [
                {
                 "urlPath": {
                  "path": {
                   "exact": "/v2/admin"
                  }
                 }
                },
                {
                 "header": {
                  "name": "x-baz",
                  "presentMatch": true
                 }
                },

        {
                 "header": {
                  "name": "x-bar",
                  "presentMatch": true
                 }
                }
```

```
                ]
               }
              }
             }
            ]
           }
          }
         ],
         "principals": [
          {
           "authenticated": {
            "principalName": {
             "safeRegex": {
              "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
             }
            }
           }
          }
         ]
        }
       }
      }
     }
    }
    {
     "name": "envoy.filters.http.rbac",
     "typedConfig": {
      "@type": "type.googleapis.com/envoy.extensions.filters.http.rbac.v3.RBAC",
      "rules": {
       "policies": {
        "consul-intentions-layer7-0": {
         "permissions": [
          {
           "andRules": {
            "rules": [
             {
              "urlPath": {
               "path": {
                "prefix": "some-path"
               }
              }
             },
             {
              "andRules": {
               "rules": [
                {
                 "metadata": {
                  "filter": "envoy.filters.http.jwt_authn",
```

```
                "path": [
                  {
                    "key": "jwt_payload_okta"
                  },
                  {
                    "key": "iss"
                  }

                ],
                "value": {
                  "stringMatch": {
                    "exact": "mytest.okta-issuer"
                  }
                }
              }
            },
            {
              "metadata": {
                "filter": "envoy.filters.http.jwt_authn",
                "path": [
                  {
                    "key": "jwt_payload_okta"
                  },
                  {
                    "key": "roles"
                  }
                ],
                "value": {
                  "stringMatch": {
                    "exact": "testing"
                  }
                }
              }
            }

]
        }
       }
     ]
   }
  }
],
"principals": [
  {
    "authenticated": {
      "principalName": {
        "safeRegex": {
          "regex": "^spiffe://test.consul/ns/default/dc/[^/]+/svc/web$"
```

```
              }
            }
          }
        }
      ]
    }
  }
 }
}
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

section[data-route='dc.show.license'] {
 @extend %license-route;
}
%license-route .validity {
 @extend %license-validity;
}
%license-route aside {
 @extend %license-route-learn-more;
}

%license-route h2 {
 @extend %display-400-semibold;
}

%license-validity p {
 color: var(--token-color-foreground-faint);
}
%license-validity dl {
 @extend %horizontal-kv-list;
 @extend %body-300-regular;
}
%license-validity dl .expired + dd {
 @extend %visually-hidden;
}
%license-validity dl dt::before {
 content: '';
 margin-right: 0.25rem; /* 4px */
}
%license-validity dl .expired::before {
 --icon-name: icon-x-circle;
 --icon-color: var(--token-color-foreground-critical);
}
%license-validity dl .warning::before {
```

```
 --icon-name: icon-alert-circle;
 --icon-color: var(--token-color-foreground-warning);
}
%license-validity dl .valid:not(.warning)::before {
 --icon-name: icon-check-circle;
 --icon-color: var(--token-color-foreground-success);
}

%license-route-learn-more
 {
 @extend %panel;
 box-shadow: none;
 padding: var(--padding-y) var(--padding-x);
 width: 40%;
 min-width: 413px;
 margin-top: 1rem; /* 16px */
}
%license-route-learn-more header > :first-child {
 @extend %display-300-semibold;
}
%license-route-learn-more header {
 margin-bottom: 1rem; /* 16px */
}
{{!
 Copyright (c) HashiCorp, Inc.
 SPDX-License-Identifier: BUSL-1.1
}}

<Route
 @name={{routeName}}
as |route|>
 <DataLoader
   @src={{
     uri '/${partition}/${nspace}/${dc}/license'
     (hash
       partition=route.params.partition
       nspace=route.params.nspace
       dc=route.params.dc
     )
   }}
 as |loader|>

{{#let
 loader.data
as |item|}}
   <BlockSlot @name="error">
     <ErrorState
       @error={{loader.error}}
```

```
    @login={{route.model.app.login.open}}
  />
</BlockSlot>

<BlockSlot @name="disconnected" as |after|>
  {{#if (eq loader.error.status "404")}}
    <Hds::Toast @color='warning'
      {{notification
        sticky=true
      }} as |T|>
      <T.Title>Warning!</T.Title>
      <T.Description>This service has been deregistered and no longer exists in the catalog.</T.Description>
    </Hds::Toast>
  {{else if (eq loader.error.status "403")}}
    <Hds::Toast @color='critical'
      {{notification
        sticky=true
      }} as |T|>
      <T.Title>Error!</T.Title>
      <T.Description>You no longer have access to this service.</T.Description>
    </Hds::Toast>
  {{else}}
    <Hds::Toast @color='warning'
      {{notification
        sticky=true
      }} as |T|>
      <T.Title>Warning!</T.Title>
      <T.Description>An error was returned whilst loading this data, refresh to try again.</T.Description>
    </Hds::Toast>
  {{/if}}
</BlockSlot>

<BlockSlot @name="loaded">
  <div class="tab-section">
    <section
      class={{class-map
        'validity'
        (array 'valid' item.Valid)
      }}
    >
      <header>
        <h2>
          {{compute (fn route.t 'expiry.header')}}
        </h2>
      </header>

      <p>
        {{compute (fn route.t 'expiry.${type}.body'
```

```
        (hash
          type=(if item.Valid 'valid' 'expired')

    date=(format-time item.License.expiration_time
            year='numeric'
            month='long'
            day='numeric'
          )
          time=(format-time item.License.expiration_time
            hour12=true
            hour='numeric'
            hourCycle='h12'
            minute='numeric'
            second='numeric'
            timeZoneName='short'
          )
          htmlSafe=true
        )
       )}}
      </p>

      <dl>
       <dt class={{class-map
          (array 'valid' item.Valid)
          (array 'expired' (not item.Valid))
          (array 'warning' (temporal-within item.License.expiration_time 2629800000))
        }}
       >
        {{compute (fn route.t 'expiry.${type}.header'
          (hash
            type=(if item.Valid 'valid' 'expired')
          )
        )}}
       </dt>

  <dd>
        {{temporal-format item.License.expiration_time}}
       </dd>
      </dl>

      <aside>
       <header>
        <h3>
          {{compute (fn route.t 'documentation.title')}}
        </h3>
       </header>
       <div class="flex gap-1.5 flex-col">
        <Hds::Link::Standalone
```

```
            @text={{compute (fn route.t 'documentation.links.license-expiration.text')}}
            @href='{{concat (env 'CONSUL_DOCS_URL') (compute (fn route.t 'documentation.links.license-expiration.link'))}}'
            @icon='docs-link'
            @iconPosition='trailing'
          />
          <Hds::Link::Standalone
            @text={{compute (fn route.t 'documentation.links.renewing-license.text')}}
            @href='{{concat (env 'CONSUL_DOCS_URL') (compute (fn route.t 'documentation.links.renewing-license.link'))}}'
            @icon='docs-link'
            @iconPosition='trailing'

        />
          <Hds::Link::Standalone
            @text={{compute (fn route.t 'documentation.links.applying-new-license.text')}}
            @href='{{concat (env 'CONSUL_DOCS_URL') (compute (fn route.t 'documentation.links.applying-new-license.link'))}}'
            @icon='docs-link'
            @iconPosition='trailing'
          />
        </div>
      </aside>

    </section>
  </div>
 </BlockSlot>
{{/let}}
</DataLoader>
</Route>
// Copyright (c) HashiCorp, Inc.
// SPDX-License-Identifier: MPL-2.0

package api

import (
 "io"
 "strings"
 "time"
)

type License struct {
 // The unique identifier of the license
 LicenseID string `json:"license_id"`

 // The customer ID associated with the license
 CustomerID string `json:"customer_id"`
```

```
 // If set, an identifier that should be used to lock the license to a
 // particular site, cluster, etc.
 InstallationID string `json:"installation_id"`

 // The time at which the license was issued
 IssueTime time.Time `json:"issue_time"`

 // The time at which the license starts being valid
 StartTime time.Time `json:"start_time"`

 // The time after which the license expires
 ExpirationTime time.Time `json:"expiration_time"`

 // The time at which the license ceases to function and can
 // no longer be used in any capacity
 TerminationTime time.Time `json:"termination_time"`

 // Whether the license will ignore termination
 IgnoreTermination bool `json:"ignore_termination"`

 //
 The product the license is valid for
 Product string `json:"product"`

 // License Specific Flags
 Flags map[string]interface{} `json:"flags"`

 // Modules is a list of the licensed enterprise modules
 Modules []string `json:"modules"`

 // List of features enabled by the license
 Features []string `json:"features"`
}

type LicenseReply struct {
 Valid    bool
 License  *License
 Warnings []string
}

func (op *Operator) LicenseGet(q *QueryOptions) (*LicenseReply, error) {
 var reply LicenseReply
 if _, err := op.c.query("/v1/operator/license", &reply, q); err != nil {
  return nil, err
 } else {
  return &reply, nil
 }
}
```

```
func (op *Operator) LicenseGetSigned(q *QueryOptions) (string, error) {
 r := op.c.newRequest("GET", "/v1/operator/license")
 r.params.Set("signed", "1")
 r.setQueryOptions(q)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return "", err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return "", err
 }

 data, err := io.ReadAll(resp.Body)
 if
 err != nil {
  return "", err
 }

 return string(data), nil
}

// LicenseReset will reset the license to the builtin one if it is still valid.
// If the builtin license is invalid, the current license stays active.
//
// DEPRECATED: Consul 1.10 removes the corresponding HTTP endpoint as licenses
// are now set via agent configuration instead of through the API
func (op *Operator) LicenseReset(opts *WriteOptions) (*LicenseReply, error) {
 var reply LicenseReply
 r := op.c.newRequest("DELETE", "/v1/operator/license")
 r.setWriteOptions(opts)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return nil, err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return nil, err
 }
 if err := decodeBody(resp, &reply); err != nil {
  return nil, err
 }
 return &reply, nil
}

// LicensePut will configure the Consul Enterprise license for the target datacenter
//
```

```
// DEPRECATED: Consul 1.10 removes the corresponding HTTP endpoint as licenses
// are now set
 via agent configuration instead of through the API
func (op *Operator) LicensePut(license string, opts *WriteOptions) (*LicenseReply, error) {
 var reply LicenseReply
 r := op.c.newRequest("PUT", "/v1/operator/license")
 r.setWriteOptions(opts)
 r.body = strings.NewReader(license)
 _, resp, err := op.c.doRequest(r)
 if err != nil {
  return nil, err
 }
 defer closeResponseBody(resp)
 if err := requireOK(resp); err != nil {
  return nil, err
 }

 if err := decodeBody(resp, &reply); err != nil {
  return nil, err
 }

 return &reply, nil
}
/**
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* SPDX-License-Identifier: BUSL-1.1
*/

.consul-intention-permission-header-list {
 dt::before {
   @extend %with-glyph-icon;
   content: 'H';
 }
}
/**
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*/

.consul-intention-permission-list {
 dt::before {
   @extend %with-glyph-icon;
 }
 dl.permission-methods dt::before {
   content: 'M';
 }
 dl.permission-path dt::before {
   content: 'P';
```

```
 }
 dl.permission-header dt::before {
   content: 'H';
 }
}
---
layout: docs
page_title: Enterprise Licenses
description: >-
 Consul Enterprise server, client, and snapshot agents require a license on startup in order to use Enterprise features. Learn how to apply licenses using environment variables or configuration files.
---

# Consul Enterprise License

## Licensing Overview

All Consul Enterprise agents must be licensed when they are started. Where that license comes from will depend on which binary is in use, whether the agent is a server, client or snapshot agent, and whether ACLs have been enabled for the cluster.

-> ** Consul Enterprise 1.10.0 removed temporary licensing.** Prior to 1.10.0, Consul Enterprise agents could start without a license and then have a license applied to them later on via the CLI or API. That functionality has been removed and replaced with the ability to load licenses from the agent's configuration or environment. Also, prior to 1.10.0, server agents would automatically propagate the license between themselves.
 This no longer occurs and the license must be present on each server agent when it is started.

Consul Enterprise 1.14.0, when running on Kubernetes, removed client agents and replaced these with virtual agents.
Virtual agents are nodes that Consul service mesh services run on. HashiCorp uses virtual agents to determine license entitlements for customers on per-node licensing and pricing agreements.

-> Visit the [Enterprise License Tutorial](/nomad/tutorials/enterprise/hashicorp-enterprise-license?utm_source=docs) for detailed steps on how to install the license key.

### Applying a License

For Consul Enterprise 1.10.0 or greater, a license must be available at the time the agent starts.
For server agents this means that they must either have the [`license_path`](/consul/docs/agent/config/config-files#license_path)
configuration set or have a license configured in the servers environment with the `CONSUL_LICENSE` or `CONSUL_LICENSE_PATH` environment variables. Both the configuration
 item and the `CONSUL_LICENSE_PATH`
environment variable point to a file containing the license whereas the `CONSUL_LICENSE` environment variable should contain the license as the value. If multiple variables are set,
the following order of precedence applies:
```

1. `CONSUL_LICENSE` environment variable
2. `CONSUL_LICENSE_PATH` environment variable
3. `license_path` configuration item.

Client agents and [snapshot agents](/consul/docs/enterprise/backups)
may also be licensed in the very same manner.
However, to avoid the need to configure the license on many client agents and snapshot agents,
those agents have the capability to retrieve the license automatically under the conditions described below.

Virtual agents do not need the license to run.

Updating the license for an agent depends on the method you used to apply the license.
- **If you used the `CONSUL_LICENSE`
environment variable**: After updating the environment variable, restart the affected agents.
- **If you used the
`CONSUL_LICENSE_PATH`
environment variable**: Update the license file first. Then, restart the affected agents.
- **If you used the `license_path` configuration item**: Update the license file first. Then, run [`consul reload`](/consul/commands/reload) for the affected agents.

Client Agent License Retrieval

When a client agent starts without a license in its configuration or environment, it will try to retrieve the license from the servers via RPCs. That RPC always requires a valid non-anonymous ACL token to authorize the request but the token doesn't need any particular permissions. As the license is required before the client actually joins the cluster, where to make those RPC requests to is inferred from the [`retry_join`](/consul/docs/agent/config/config-files#retry_join) configuration. If `retry_join` is unset or no [`agent` token](/consul/docs/agent/config/config-files#acl_tokens_agent) is set then the client agent will immediately shut itself down.

If all preliminary checks
pass the client agent will attempt to reach out to any server on its RPC port to
request the license. These requests will be retried for up to 5 minutes and if it is unable to retrieve a license within that time frame it will shut itself down.

If ACLs are disabled then the license must be provided to the client agent through one of the three methods listed below.
Failure in providing the client agent with a licence will prevent the client agent from joining the cluster.

1. `CONSUL_LICENSE` environment variable
2. `CONSUL_LICENSE_PATH` environment variable
3. `license_path` configuration item.

Snapshot Agent License Retrieval

The snapshot agent has similar functionality to the client agent for automatically retrieving the license. However, instead of requiring a server agent to talk to, the snapshot agent can request the license from the server or

client agent it would use for all other operations. It still requires an ACL token to authorize the request. Also like client agents,
 the snapshot agent will shut itself down after being unable to retrieve the license for 5
minutes.
/**
* Copyright (c) HashiCorp, Inc.
* SPDX-License-Identifier: BUSL-1.1
*/

.consul-intention-permission-list {
 .detail > div {
   display: flex;
   width: 100%;
 }
 strong {
   margin-right: 8px;
 }
}
{{!
 Copyright (c) HashiCorp, Inc.
 SPDX-License-Identifier: BUSL-1.1
}}

{{#if isVisible}}
 <Hds::Alert @type="inline" class='mb-3 mt-2 agentless-node-notice' data-test-node-agentless-notice as |A|>
   <A.Title>
     {{t 'routes.dc.nodes.index.agentless.notice.header'}}
     <Hds::Button
       @color='secondary'
       @text='Dismiss notice'
       {{on 'click' this.dismissAgentlessNotice}}
       @icon='x'
       @size='small'
       @isIconOnly={{true}}
     />
   </A.Title>
   <A.Description>{{t 'routes.dc.nodes.index.agentless.notice.body'}}</A.Description>
   <A.Link::Standalone @href='{{env "CONSUL_DOCS_DEVELOPER_URL"}}/connect/dataplane'
                       @text={{t 'routes.dc.nodes.index.agentless.notice.footer'}}
                       @icon='docs-link'
                       @iconPosition='trailing' />
 </Hds::Alert>
{{/if}}
/*!
* QUnit 2.19.4
* https://qunitjs.com/
*
* Copyright OpenJS Foundation and other contributors

```
* Released under the MIT license
* https://jquery.org/license
*/
{{!
 Copyright (c) HashiCorp, Inc.
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}}

<Hds::Alert @type="inline" class="mb-3 mt-2" as |A|>
 <A.Description>{{t "components.consul.intention.notice.permissions.body"}}</A.Description>
 <A.Link::Standalone
   @text={{t "components.consul.intention.notice.permissions.footer"}}
   @href="{{env 'CONSUL_DOCS_URL'}}/connect/intentions"
   @icon="docs-link"
   @iconPosition="trailing"
   @size="small"
 />
</Hds::Alert>
```

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Parameters

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```
{
 "name": "envoy.filters.http.jwt_authn",
 "typedConfig": {
  "@type": "type.googleapis.com/envoy.extensions.filters.http.jwt_authn.v3.JwtAuthentication",
  "providers": {
   "auth0": {
    "issuer": "another-issuer",
    "payloadInMetadata": "jwt_payload_auth0",
    "remoteJwks": {
     "asyncFetch": {
      "fastListener": true
     },
     "httpUri": {
      "cluster": "jwks_cluster_auth0",
      "timeout": "1s",
      "uri": "https://example-auth0.com/.well-known/jwks.json"
     }
    }
   },
   "okta": {
    "issuer": "test-issuer",
    "payloadInMetadata": "jwt_payload_okta",
    "remoteJwks": {
     "asyncFetch": {
      "fastListener": true
     },
     "httpUri": {
      "cluster": "jwks_cluster_okta",
      "timeout": "1s",
      "uri": "https://example-okta.com/.well-known/jwks.json"
```

```
        }
       }
      }
     },
     "rules": [
      {

    "match": {
          "prefix": "/"
       },
       "requires": {
        "requiresAll": {
         "requirements": [
          {
           "requiresAny": {
            "requirements": [
             {
              "providerName": "okta"
             },
             {
              "allowMissingOrFailed": {}
             }
            ]
           }
          },
          {
           "requiresAny": {
            "requirements": [
             {
              "providerName": "auth0"
             },
             {
              "allowMissingOrFailed": {}
             }
            ]
           }
          }
         ]
        }
       }
      }
     ]
    }
    }
    {{!
     Copyright (c) HashiCorp, Inc.
     SPDX-License-Identifier: BUSL-1.1
    }}
```

```
<div
 ...attributes
 class="consul-intention-permission-form"
>
<FormGroup
 @name={{name}}
as |group|>

 {{yield (hash
  submit=(action 'submit' changeset)
  reset=(action 'reset' changeset)

  isDirty=(and changeset.isValid)
  changeset=changeset
 )}}

 <fieldset>
  <div data-property="action">
   <span class="label">
    Should this permission allow the source connect to the destination?
   </span>
   <div role="radiogroup" class={{if changeset.error.Action ' has-error'}}>
    {{#each intents as |intent|}}
     <label>
      <span>{{capitalize intent}}</span>
      <input
       type="radio"
       name="Action"
       value={{intent}}
       checked={{if (eq changeset.Action intent) 'checked'}}
       onchange={{action (changeset-set changeset 'Action') value="target.value"}}
      />
     </label>
    {{/each}}
   </div>
  </div>
 </fieldset>

 <fieldset>
  <header>
   <h2>Path</h2>
  </header>
  <div>
    <group.Element
     @name="PathType"
     @type="select"
    as |el|>
```

```
        <el.Label>
          Path type
        </el.Label>
        <PowerSelect
          @options={{pathTypes}}
          @selected={{pathType}}
          @onChange={{action 'change' 'HTTP.PathType' changeset}} as |Type|>
          {{get pathLabels Type}}
        </PowerSelect>
      </group.Element>

{{#if shouldShowPathField}}
      <group.Element
        @name="Path"
        @error={{changeset-get changeset 'error.HTTP.Path'}}
      as |el|>
        <el.Label>
          {{get pathLabels pathType}}
        </el.Label>
        <el.Text
          @value={{changeset-get changeset 'HTTP.Path'}}
          oninput={{action 'change' 'HTTP.Path' changeset}}
        />
        <State @state={{el.state}} @matches="error">
          <el.Error>

          {{#if (eq (changeset-get changeset 'HTTP.Path') 'Regex')}}
            Path Regex should not be blank
          {{else}}
            Path should begin with a '/'
          {{/if}}
          </el.Error>
        </State>
      </group.Element>
{{/if}}

  </div>
 </fieldset>

 <fieldset>
  <h2>Methods</h2>
  <div class="type-toggle">
    <span>All methods are applied by default unless specified</span>
    <group.Element
      @name="allMethods"
    as |el|>
      <el.Checkbox
        checked={{if allMethods 'checked'}}
```

```
        onchange={{action 'change' 'allMethods' changeset}}
      />
      <el.Label>
        All Methods
      </el.Label>
    </group.Element>
  </div>

{{#if shouldShowMethods}}
  <div class="checkbox-group" role="group">
    {{#each methods as |method|}}
      <label class="type-checkbox">
        <input
          type="checkbox"
          name="method"
          value={{method}}

  checked={{if (includes method changeset.HTTP.Methods) 'checked'}}
          onchange={{action 'change' 'method' changeset}}
        />
        <span>{{method}}</span>
      </label>
    {{/each}}
  </div>
{{/if}}
 </fieldset>

 <fieldset>
  <h2>Headers</h2>

  <Consul::Intention::Permission::Header::List
    @items={{changeset-get changeset 'HTTP.Header'}}
    @ondelete={{action 'delete' 'HTTP.Header' changeset}}
  as |headerList|>

  </Consul::Intention::Permission::Header::List>

  <Consul::Intention::Permission::Header::Form
    @onsubmit={{action 'add' 'HTTP.Header' changeset}}
  as |headerForm|>
    <Ref @target={{this}} @name="headerForm" @value={{headerForm}} />
  </Consul::Intention::Permission::Header::Form>

  <Hds::ButtonSet>
    <Hds::Button
      data-test-add-header
      @text='Add{{if (gt (get (changeset-get changeset 'HTTP.Header') 'length') 0) ' another' ''}} header'
      @color='primary'
```

```
      disabled={{if (not this.headerForm.isDirty)
 'disabled'}}
      onclick={{action this.headerForm.submit}}
    />
    <Hds::Button
      @text='Cancel'
      @color='secondary'
      onclick={{action this.headerForm.reset}}
    />
  </Hds::ButtonSet>
 </fieldset>
 </FormGroup>
</div>
```

1.151 etcd-client-pkg 3.6.0

1.151.1 Available under license :

Features

This document provides an overview of etcd features and general development guidelines for adding and deprecating them. The project maintainers can override these guidelines per the need of the project following the project governance.

Overview

The etcd features fall into three stages, experimental, stable, and unsafe.

Experimental

Any new feature is usually added as an experimental feature. An experimental feature is characterized as below:
- Might be buggy due to a lack of user testing. Enabling the feature may not work as expected.
- Disabled by default when added initially.
- Support for such a feature may be dropped at any time without notice
  - Feature-related issues may be given lower priorities.
  - It can be removed in the next minor or major release without following the feature deprecation policy unless it graduates to a stable future.

Stable

A stable feature is characterized as below:
- Supported as part of the supported releases of etcd.
-
 May be enabled by default.
- Discontinuation of support must follow the feature deprecation policy.

Unsafe

Unsafe features are rare and listed under the `Unsafe feature:` section in the etcd usage documentation. By default, they are disabled. They should be used with caution following documentation. An unsafe feature can be removed in the next minor or major release without following the feature deprecation policy.

Development Guidelines

Adding a new feature

Any new enhancements to the etcd are typically added as an experimental feature. The general development requirements are listed below. They can be somewhat flexible depending on the scope of the feature and review discussions and will evolve over time.

- Open an issue
  - It must provide a clear need for the proposed feature.
  - It should list development work items as checkboxes. There must be one work item towards future graduation to a stable future.
  - Label the issue with `type/feature` and `experimental`.
  - Keep the issue open for tracking purposes until a decision is made on graduation.
- Open a Pull Request (PR)
  - Provide unit tests. Integration tests are also recommended as possible.
  - Provide robust e2e test coverage. If the feature being added is complicated or quickly needed, maintainers can decide to go with e2e tests for basic coverage initially and have robust coverage added at a later time before the feature graduation to the stable feature.
  - Provide logs for proper debugging.
  - Provide metrics and benchmarks as needed.
  - The Feature should be disabled by default.
  - Any configuration flags related to the implementation of the feature must be prefixed with `experimental` e.g. `--experimental-feature-name`.
  - Add a CHANGELOG entry.
- At least two maintainers must approve feature requirements and related code changes.

Graduating an Experimental feature to Stable

It is important that experimental features don't get stuck in that stage.
They should be revisited and moved to the stable stage following the graduation steps as described here.

Locate graduation candidate

Decide if an experimental feature is ready for graduation to the stable stage.

- Find the issue that was used to enable the experimental feature initially. One way to find such issues is to search for issues with `type/feature` and `experimental` labels.
- Fix any known open issues against the feature.
- Make sure the feature was enabled for at least one previous release. Check the PR(s) reference from the issue to see when the feature-related code changes were merged.

Provide implementation

If an experimental feature is found ready for graduation to the stable stage, open a Pull Request (PR) with the following changes.

- Add robust e2e tests if not already provided.
- Add a new stable feature flag identical to the experimental feature flag but without the `--experimental` prefix.

- Deprecate the experimental feature following the [feature deprecation
 policy](#Deprecating-a-feature).
- Implementation must ensure that both the graduated and deprecated experimental feature flags work as expected. Note that both these flags will co-exist for the timeframe described in the feature deprecation policy.
- Enable the graduated feature by default if needed.

At least two maintainers must approve the work. Patch releases should not be considered for graduation.

Deprecating a feature

Experimental
An experimental feature deprecates when it graduates to the stable stage.
- Add a deprecation message in the documentation of the experimental feature with a recommendation to use a related stable feature. e.g. `DEPRECATED. Use <feature-name> instead.`
- Add a `deprecated` label in the issue that was initially used to enable the experimental feature.

Stable
As the project evolves, a stable feature may sometimes need to be deprecated and removed. Such a situation should be handled using the steps below:
- Create an issue for tracking
 purposes.
- Add a deprecation message in the feature usage documentation before a planned release for feature deprecation. e.g. `To be deprecated in <release>.`. If a new feature replaces the `To be deprecated` feature, then also provide a message saying so. e.g. `Use <feature-name> instead.`.
- Deprecate the feature in the planned release with a message as part of the feature usage documentation. e.g. `DEPRECATED`. If a new feature replaces the deprecated feature, then also provide a message saying so. e.g. `DEPRECATED. Use <feature-name> instead.`.
- Add a `deprecated` label in the related issue.

Remove the deprecated feature in the following release. Close any related issue(s). At least two maintainers must approve the work. Patch releases should not be considered for deprecation.
Set up the local cluster

For testing and development deployments, the quickest and easiest way is to configure a local cluster. For a production deployment, refer to the [clustering][clustering] section.

Local standalone cluster

Starting a cluster

Run the following to deploy an etcd cluster as a standalone cluster:

```
$ ./etcd
...
```

If the `etcd` binary is not present in the current working directory, it might be located either at `$GOPATH/bin/etcd`

or at `/usr/local/bin/etcd`. Run the command appropriately.

The running etcd member listens on `localhost:2379` for client requests.

Interacting with the cluster

Use `etcdctl` to interact with the running cluster:

1. Store an example key-value pair in the cluster:

```
$ ./etcdctl put foo bar
OK
```

If OK is printed, storing the key-value pair is successful.

2. Retrieve the value of `foo`:

```
$ ./etcdctl get foo
bar
```

If `bar` is returned, interaction with the etcd
cluster is working as expected.

Local multi-member cluster

Starting a cluster

A `Procfile` at the base of the etcd git repository is provided to easily configure a local multi-member cluster. To start a multi-member cluster, navigate to the root of the etcd source tree and perform the following:

1. Install `goreman` to control Procfile-based applications:

```
$ go install github.com/mattn/goreman@latest
```

The installation will place executables in the $GOPATH/bin. If $GOPATH environment variable is not set, the tool will be installed into the $HOME/go/bin. Make sure that $PATH is set accordingly in your environment.

2. Start a cluster with `goreman` using etcd's stock Procfile:

```
$ goreman -f Procfile start
```

The members start running. They listen on `localhost:2379`, `localhost:22379`, and `localhost:32379` respectively for client requests.

Interacting with the cluster

Use `etcdctl` to interact with the running cluster:

1. Print
the list of members:

```
$ etcdctl --write-out=table --endpoints=localhost:2379 member list
```
The list of etcd members is displayed as follows:

```
+------------------+---------+--------+-----------------------+-----------------------+
|        ID        | STATUS  |  NAME  |      PEER ADDRS       |     CLIENT ADDRS      |
+------------------+---------+--------+-----------------------+-----------------------+
| 8211f1d0f64f3269 | started | infra1 | http://127.0.0.1:2380  | http://127.0.0.1:2379  |
| 91bc3c398fb3c146 | started | infra2 | http://127.0.0.1:22380 | http://127.0.0.1:22379 |
| fd422379fda50e48 | started | infra3 | http://127.0.0.1:32380 | http://127.0.0.1:32379 |
+------------------+---------+--------+-----------------------+-----------------------+
```

2. Store an example key-value pair in the cluster:

```
$ etcdctl put foo bar
OK
```

If OK is printed, storing the key-value pair is successful.

###
Testing fault tolerance

To exercise etcd's fault tolerance, kill a member and attempt to retrieve the key.

1. Identify the process name of the member to be stopped.

The `Procfile` lists the properties of the multi-member cluster. For example, consider the member with the process name, `etcd2`.

2. Stop the member:

```
# kill etcd2
```

```
$ goreman run stop etcd2
```

3. Store a key:

```
$ etcdctl put key hello
OK
```

4. Retrieve the key that is stored in the previous step:

```
$ etcdctl get key
hello
```

5. Retrieve a key from the stopped member:

```
$ etcdctl --endpoints=localhost:22379 get key
```

The command should display an error caused by connection failure:

```
2017/06/18 23:07:35 grpc: Conn.resetTransport failed to create client transport: connection error: desc =
"transport: dial tcp 127.0.0.1:22379: getsockopt: connection refused"; Reconnecting to "localhost:22379"
Error:  grpc:
timed out trying to connect
```

6. Restart the stopped member:

```
$ goreman run restart etcd2
```

7. Get the key from the restarted member:

```
$ etcdctl --endpoints=localhost:22379 get key
hello
```

Restarting the member re-establishs the connection. `etcdctl` will now be able to retrieve the key successfully. To learn more about interacting with etcd, read [interacting with etcd section][interacting].

[clustering]: https://etcd.io/docs/latest/op-guide/clustering/

[interacting]: https://etcd.io/docs/latest/dev-guide/interacting_v3/
Branch management

Guide

* New development occurs on the [main branch][main].
* The main branch should always have a green build!
* Backwards-compatible bug fixes should target the main branch and subsequently be ported to stable branches.
* Once the main branch is ready for release, it will be tagged and become the new stable branch.

The etcd team has adopted a *rolling release model* and supports two stable versions of etcd.

Main branch

The `main` branch is our development branch. All new features land here first.

To try new and experimental features, pull `main` and play with it. Note that `main` may not be stable because new features may introduce bugs.

Before the release of the next stable version, feature PRs will be frozen. A [release manager](./release.md#release-management) will be assigned to the major/minor version and will lead the etcd community in testing, bug-fix, and documentation of the release for one to two weeks.

Stable branches

All branches with
 the prefix `release-` are considered _stable_ branches.

After every minor release (semver.org), we will have a new stable branch for that release, managed by a [patch release manager](./release.md#release-management). We will keep fixing the backward-compatible bugs for the latest two stable releases. A _patch_ release to each supported release branch, incorporating any bug fixes, will be once every two weeks, given any patches.

[main]: https://github.com/etcd-io/etcd/tree/main
Issue triage guidelines

Purpose

Speed up issue management.

The `etcd` issues are listed at <https://github.com/etcd-io/etcd/issues> and are identified with labels. For example, an issue that is identified as a bug will be set to the label `type/bug`.

The etcd project uses labels to indicate common attributes such as `area`, `type`, and `priority` of incoming issues.

New issues will often start without any labels, but typically `etcd` maintainers, reviewers, and members will add labels by following these triage guidelines. The detailed list of labels can be found at <https://github.com/etcd-io/etcd/labels>.

Scope

This document serves as the primary guidelines for triaging incoming issues in `etcd`.

All contributors are encouraged and welcome to help manage issues which will help reduce the burden on project maintainers, though the work and responsibilities discussed in this document are created with `etcd` project reviewers and members in mind as these individuals will have
triage access to the etcd project which is a requirement for actions like applying labels or closing issues.

Refer to [etcd community membership](https://github.com/etcd-io/etcd/blob/main/Documentation/contributor-guide/community-membership.md) for guidance on becoming an etcd project member or reviewer.

Step 1 - Find an issue to triage

To get started you can use the following recommended issue searches to identify issues that are in need of triage:

* [Issues that have no labels](https://github.com/etcd-io/etcd/issues?q=is%3Aissue+is%3Aopen+sort%3Aupdated+no%3Alabel)
* [Issues created recently](https://github.com/etcd-io/etcd/issues?q=is%3Aissue+is%3Aopen+)
* [Issues not assigned but linked pr](https://github.com/etcd-io/etcd/issues?q=is%3Aopen+is%3Aissue+no%3Aassignee+linked%3Apr)
* [Issues with no comments](https://github.com/etcd-io/etcd/issues?q=is%3Aopen+is%3Aissue+comments%3A0+)
* [Issues with help wanted](https://github.com/etcd-io/etcd/issues?q=is%3Aopen+is%3Aissue+label%3A%22help+wanted%22+)

##
Step 2 - Check the issue is valid

Before we start adding labels or trying to work out a priority, our first triage step needs to be working out if the issue actually belongs to the etcd project and is not a duplicate.

Issues that don't belong to etcd

Sometimes issues are reported that belong to other projects that `etcd` use. For example, `grpc` or `golang` issues. Such issues should be addressed by asking the reporter to open issues in the appropriate other projects.

These issues can generally be closed unless a maintainer and issue reporter see a need to keep it open for tracking purposes. If you have triage permissions please close it, alternatively mention the @etcd-io/members group to request a member with triage access to close the issue.

Duplicate issues

If an issue is a duplicate, add a comment stating so along with a reference for the original issue and if you have triage permissions please close it, alternatively mention the @etcd-io/members
group to request a member with triage access close the issue.

Step 3 - Apply the appropriate type of label

Adding a `type` label to an issue helps create visibility on the health of the project and helps contributors identify potential priorities, i.e. addressing existing bugs or test flakes before implementing new features.

Support requests

As a general rule, the focus for etcd support is to address common themes in a broad way that helps all users, i.e. through channels like known issues, frequently asked questions, and high-quality documentation. To make the best use of project members time we should avoid providing 1:1 support if a broad approach is available.

Some people mistakenly use our GitHub bug report or feature request templates to file support requests. Usually, they are asking for help operating or configuring some aspect of etcd. Support requests for etcd should instead be raised as [discussions](https://github.com/etcd-io/etcd/discussions).

Common
types of support requests are:

1. Questions about configuring or operating existing well-documented etcd features, for example, <https://github.com/etcd-io/etcd/issues/15945>. Note - If an existing feature is not well documented please apply the `area/documentation` label and propose documentation improvements that would prevent future users from stumbling on the problem again.

2. Bug reports or questions about unsupported versions of etcd, for example <https://github.com/etcd-io/etcd/issues/15796>. When responding to these issues please refer to our [supported versions documentation](https://etcd.io/docs/latest/op-guide/versioning) and encourage the reporter to upgrade to a recent patch release of a supported version as soon as possible. We should limit the effort supporting users that do not make the effort to run a supported version of etcd or ensure their version is patched.

3. Bug reports that do not provide a complete list of steps to reproduce the issue and/or contributors
are not able to reproduce the issue, for example, <https://github.com/etcd-io/etcd/issues/15740>. We should limit the effort we put into reproducing issues ourselves and motivate users to provide the necessary information to accept the bug report.

4. General questions that are filed using feature request or bug report issue templates, for example, <https://github.com/etcd-io/etcd/issues/15914>. Note - These types of requests may surface good additions to our [frequently asked questions](https://etcd.io/docs/v3.5/faq).

If you identify that an issue is a support request please:

1. Add the `type/support` or `type/question` label.

2. Add the following comment to inform the issue creator that discussions should be used instead and that this issue will be converted to a discussion.

> Thank you for your question, this support issue will be moved to our [Discussion Forums](https://github.com/etcd-io/etcd/discussions).
>
> We are trying to consolidate the channels to which

questions for help/support are posted so that we can improve our efficiency in responding to your requests, and make it easier for you to find answers to frequently asked questions and how to address common use cases.
  >
  > We regularly see messages posted in multiple forums, with the full response thread only in one place or, worse, spread across multiple forums. Also, the large volume of support issues on GitHub is making it difficult for us to use issues to identify real bugs.
  >
  > Members of the etcd community use Discussion Forums to field support requests. Before posting a new question, please search these for answers to similar questions, and also familiarize yourself with:
  >
  > 1. [user documentation](https://etcd.io/docs/latest)
  > 2. [frequently asked questions](https://etcd.io/docs/v3.5/faq)
  >
  > Again, thanks for using etcd and raising this question.
  >
  > The etcd team

3. Finally, click `Convert to discussion` on the right-hand panel,
selecting the appropriate discussion category.

Bug reports

If an issue has been raised as a bug it should already have the `type/bug` label, however, if this is missing for an issue you determine to be a bug please add the label manually.

The next step is to validate if the issue is indeed a bug. If not, add a comment with the findings and close the trivial issue. For non-trivial issues, wait to hear back from the issue reporter and see if there is any objection. If the issue reporter does not reply in 30 days, close the issue.

If the problem can not be reproduced or requires more information, leave a comment for the issue reporter as soon as possible while the issue is fresh for the issue reporter.

Feature requests

New feature requests should be created via the etcd feature request template and in theory already have the `type/feature` label, however, if this is missing for an issue you determine to be a feature please add the label manually.

Test flakes

Test flakes
are a specific type of bug that the etcd project tracks separately as these are a priority to address. These should be created via the test flake template and in theory already have the `type/flake` label, however, if this is missing for an issue you determine to be related to a flaking test please add the label manually.

Step 4 - Define the areas impacted

Adding an `area` label to an issue helps create visibility on which areas of the etcd project require attention and

helps contributors find issues to work on relating to their particular skills or knowledge of the etcd codebase.

If an issue crosses multiple domains please add additional `area` labels to reflect that.

Below is a brief summary of the area labels in active use by the etcd project along with any notes on their use:

Label	Notes
area/external	Tracking label for issues raised that are external to etcd.
area/community	
area/raft	
area/clientv3	
area/performance	
area/security	
area/tls	
area/auth	
area/etcdctl	
area/etcdutl	
area/contrib	Not to be confused with `area/community` this label is specifically used for issues relating to community-maintained scripts or files in the `contrib/` directory which aren't part of the core etcd project.
area/documentation	
area/tooling	Generally used in relation to the third party / external utilities or tools that are used in various stages of the etcd build, test, or release process, for example, tooling to create sboms.
area/testing	
area/robustness-testing	

Step 5 - Prioritise the issue

If an issue lacks a priority label it has not been formally prioritized yet.

Adding a `priority` label helps the etcd project understand what is important and should be worked on now, and conversely, what is not as important and is on the project backlog.

Priority label	What it means	Examples
`priority/critical-urgent`	Maintainers are responsible for making sure that these issues (in their area) are being actively worked oni.e., drop what you're doing. The stuff is burning. These should be fixed before the next release.	user-visible critical bugs in core features broken builds on tier1 supported platforms tests and critical security issues
`priority/important-soon`	Must be staffed and worked on either currently or very soonideally in time for the next release.	
`priority/important-longterm`	Important over the long term, but may not be currently staffed and/or may require multiple releases to complete.	
`priority/backlog`	General agreement that this is a nice-to-have, but no one's available to work on it anytime soon. Community contributions would be most welcome in the meantime, though it might take a while to get them reviewed if reviewers are fully occupied with higher-priority issuesfor example, immediately before a release.	

| `priority/awaiting-more-evidence`
| Possibly useful, but not yet enough support to actually get it done. | Mostly placeholders for potentially good ideas, so that they don't get completely forgotten, and can be referenced or deduped every time they come up |

Step 6 - Support new contributors

As part of the `etcd` triage process once the `kind` and `area` have been determined, please consider if the issue would be suitable for a less experienced contributor. The `good first issue` label is a subset of the `help wanted` label, indicating that members have committed to providing extra assistance for new contributors. All `good first issue` items also have the `help wanted` label.

Help wanted

Items marked with the `help wanted` label need to ensure that they meet these criteria:

* **Low Barrier to Entry** - It should be easy for new contributors.

* **Clear** - The task is agreed upon and does not require further discussions in the community.

* **Goldilocks priority** - The priority
should not be so high that a core contributor should do it, but not too low that it isnt useful enough for a core contributor to spend time reviewing it, answering questions, helping get it into a release, etc.

Good first issue

Items marked with `good first issue` are intended for first-time contributors. It indicates that members will keep an eye out for these pull requests and shepherd it through our processes.

New contributors should not be left to find an approver, ping for reviews, decipher test commands, or identify that their build failed due to a flake. It is important to make new contributors feel welcome and valued. We should assure them that they will have an extra level of help with their first contribution.

After a contributor has successfully completed one or two `good first issue` items, they should be ready to move on to `help wanted` items.

* **No Barrier to Entry** - The task is something that a new contributor can tackle without advanced setup or domain knowledge.

*
Solution Explained - The recommended solution is clearly described in the issue.

* **Gives Examples** - Link to examples of similar implementations so new contributors have a reference guide for their changes.

* **Identifies Relevant Code** - The relevant code and tests to be changed should be linked in the issue.

* **Ready to Test** - There should be existing tests that can be modified, or existing test cases fit to be copied. If the area of code doesnt have tests, before labeling the issue, add a test fixture. This prep often makes a great help

wanted task!

Step 7 - Follow up

Once initial triage has been completed, issues need to be re-evaluated over time to ensure they don't become stale incorrectly.

Track important issues

If an issue is at risk of being closed by the stale bot in the future, but is an important issue for the etcd project, then please apply the `stage/tracked` label and remove any `stale` labels that exist. This will ensure the project does not lose sight of the issue.

Close incomplete issues

Issues that lack enough information from the issue reporter should be closed if the issue reporter does not provide information in 30 days. Issues can always be re-opened at a later date if new information is provided.

Check for incomplete work

If an issue owned by a developer has no pull request created in 30 days, contact the issue owner and kindly ask about the status of their work, or to release ownership on the issue if needed.
PR management

Purpose

Speed up PR management.

The `etcd` PRs are listed at https://github.com/etcd-io/etcd/pulls
A PR can have various labels, milestones, reviewers, etc. The detailed list of labels can be found at https://github.com/kubernetes/kubernetes/labels

Following are a few example searches on PR for convenience:
* [Open PRS for milestone etcd-v3.6](https://github.com/etcd-io/etcd/pulls?utf8=%E2%9C%93&q=is%3Apr+is%3Aopen+milestone%3Aetcd-v3.6)
* [PRs under investigation](https://github.com/etcd-io/etcd/labels/Investigating)

Scope

These guidelines serve as a primary document for managing PRs in `etcd`. Everyone is welcome to help manage PRs but the work and responsibilities discussed in this document are created with `etcd` maintainers and active contributors in mind.

Ensure tests are run

The etcd project use Kubernetes Prow and GitHub Actions to run tests. To ensure all required tests run if a pull request is ready for testing and still has the `needs-ok-to-test`

label then please comment on the pull request `/ok-to-test`.

Handle inactive PRs
Poke PR owner if review comments are not addressed in 15 days. If the PR owner does not reply in 90 days, update the PR with a new commit if possible. If not, inactive PR should be closed after 180 days.

Poke reviewer if needed

Reviewers are responsive in a timely fashion, but considering everyone is busy, give them some time after requesting a review if a quick response is not provided. If the response is not provided in 10 days, feel free to contact them via adding a comment in the PR or sending an email or message on Slack.

Verify important labels are in place

Make sure that appropriate reviewers are added to the PR. Also, make sure that a milestone is identified. If any of these or other important labels are missing, add them. If a correct label cannot be decided, leave a comment for the maintainers to do so as needed.
Roadmap

etcd uses GitHub milestones to track all tasks in each major or minor release. The `roadmap.md` file only records the
most important tasks for each release. The list is based on the current maintainer capacity that may shift over time. Proposed milestones are what we think we can deliver with the people we have. If we have more support on the important
stuff, we could pick up more items from the backlog. Note that etcd will continue to mainly focus on technical debt over
the next few major or minor releases.

Each item has an assigned priority. Refer to [priority definitions](https://github.com/etcd-io/etcd/blob/main/Documentation/contributor-guide/triage_issues.md#step-5---prioritise-the-issue).

v3.6.0

For a full list of tasks in `v3.6.0`, please see [milestone etcd-v3.6](https://github.com/etcd-io/etcd/milestone/38).

Title	Priority	Status	Note
[Support downgrade](https://github.com/etcd-io/etcd/issues/11716)	priority/important-soon	In progress	etcd will support downgrade starting from 3.6.0. But it will also support offline downgrade from 3.5 to 3.4.
[StoreV2 deprecation](https://github.com/etcd-io/etcd/issues/12913)	priority/important-soon	In progress	This task will be covered in both 3.6 and 3.7.
[Release raft 3.6.0](https://github.com/etcd-io/raft/issues/89)	priority/important-soon	Not started	etcd 3.6.0 will depends on raft 3.6.0

[Release bbolt 1.4.0](https://github.com/etcd-io/bbolt/issues/553)	priority/important-soon	Not started	etcd 3.6.0 will depends on bbolt 1.4.0
[Support /livez and /readyz endpoints](https://github.com/etcd-io/etcd/issues/16007)	priority/important-longterm	In progress	It provides clearer APIs, and can also work around the stalled writes issue
[Bump gRPC](https://github.com/etcd-io/etcd/issues/16290)	priority/important-longterm	Completed	It isn't guaranteed to be resolved in 3.6, and might be postponed to 3.7 depending on the effort and risk.
[Deprecate grpc-gateway or bump it](https://github.com/etcd-io/etcd/issues/14499)	priority/important-longterm	Completed	It isn't guaranteed to be resolved in 3.6, and might be postponed to 3.7 depending on the effort and risk.
[bbolt: Add logger into bbolt](https://github.com/etcd-io/bbolt/issues/509)	priority/important-longterm	Completed	It's important to diagnose bbolt issues
[bbolt: Add surgery commands](https://github.com/etcd-io/bbolt/issues/370)	priority/important-longterm	Completed	Surgery commands are important for fixing corrupted db files
[Evaluate and (Gradulate or deprecate/remove) experimental features](https://github.com/etcd-io/etcd/issues/16292)	priority/backlog	Not started	This task will be covered in both 3.6 and 3.7.

v3.7.0

For a full list of tasks in `v3.7.0`, please see [milestone etcd-v3.7](https://github.com/etcd-io/etcd/milestone/39).

Title	Priority	Note
[StoreV2 deprecation](https://github.com/etcd-io/etcd/issues/12913)	P0	Finish the remaining tasks 3.7.
[Refactor lease: Lease might be revoked by mistake by old leader](https://github.com/etcd-io/etcd/issues/15247)	P1	to be investigated & discussed
[Integrate raft's new feature (async write) into etcd](https://github.com/etcd-io/etcd/issues/16291)	P1	It should improve the performance
[bbolt: Support customizing the bbolt rebalance threshold](https://github.com/etcd-io/bbolt/issues/422)	P2	It may get rid of etcd's defragmentation. Both bbolt and etcd need to be changed.
[Evaluate and (graduate or deprecate/remove) experimental features](https://github.com/etcd-io/etcd/issues/16292)	P2	Finish the remaining tasks 3.7.

Backlog (future releases)

Title	Priority	Note
[Remove the dependency on

grpc-go's experimental API](https://github.com/etcd-io/etcd/issues/15145) | | |
[Protobuf: cleanup both golang/protobuf and gogo/protobuf](https://github.com/etcd-io/etcd/issues/14533)		
[Proposals should include a merkle root](https://github.com/etcd-io/etcd/issues/13839)		
[Add Distributed Tracing using OpenTelemetry](https://github.com/etcd-io/etcd/issues/12460)		
[Support CA rotation](https://github.com/etcd-io/etcd/issues/11555)		
[bbolt: Migrate all commands to cobra style commands](https://github.com/etcd-io/bbolt/issues/472)		
[raft: enhance the configuration change validation](https://github.com/etcd-io/raft/issues/80)		

Release

The guide talks about how to release a new version of etcd.

The procedure includes some manual steps for sanity checking, but it can probably be further scripted. Please keep this document up-to-date if making changes to the release process.

Release management

The following pool of release candidates manages the release of each etcd major/minor version as well as manages patches
to each stable release branch. They are responsible for communicating the timelines and status of each release and for ensuring the stability of the release branch.

- Benjamin Wang [@ahrtr](https://github.com/ahrtr)
- James Blair [@jmhbnz](https://github.com/jmhbnz)
- Marek Siarkowicz [@serathius](https://github.com/serathius)
- Sahdev Zala [@spzala](https://github.com/spzala)
- Wenjia Zhang [@wenjiaswe](https://github.com/wenjiaswe)

All release version numbers follow the format of [semantic versioning 2.0.0](http://semver.org/).

Major, minor version release, or its pre-release

- Ensure
 the relevant [milestone](https://github.com/etcd-io/etcd/milestones) on GitHub is complete. All referenced issues should be closed or moved elsewhere.
- Ensure the latest [upgrade documentation](https://etcd.io/docs/next/upgrades) is available.
- Bump [hardcoded MinClusterVerion in the repository](https://github.com/etcd-io/etcd/blob/v3.4.15/version/version.go#L29), if necessary.
- Add feature capability maps for the new version, if necessary.

Patch version release

- To request a backport, developers submit cherry-pick PRs targeting the release branch. The commits should not include merge commits. The commits should be restricted to bug fixes and security patches.
- The cherrypick PRs should target the appropriate release branch (`base:release-<major>-<minor>`). The k8s infra cherry pick robot `/cherrypick <branch>` PR chatops command may be used to automatically generate cherrypick PRs.

- The release patch manager reviews the cherrypick PRs. Please discuss carefully what is backported to the patch release. Each patch release should be strictly better than its predecessor.
- The release patch manager will cherry-pick these commits starting from the oldest one into stable branch.

Write a release note

- Write an introduction for the new release. For example, what major bug we fix, what new features we introduce, or what performance improvement we make.
- Put `[GH XXXX]` at the head of the change line to reference the Pull Request that introduces the change. Moreover, add a link on it to jump to the Pull Request.
- Find PRs with the `release-note` label and explain them in the `NEWS` file, as a straightforward summary of changes for end-users.

Patch release criteria

The etcd project aims to release a new patch version if any of the following conditions are met:

- Fixed one or more major CVEs (>=7.5).
- Fixed one or more critical bugs.
- Fixed three or more major bugs.
- Fixed five or more minor bugs.

Release guide

Prerequisites

There are some prerequisites, which should be done before the release process. These are one-time operations, which don't need to be executed before releasing each version.

1. Generate a GPG key and add it to your GitHub account. Refer to the links on [settings](https://github.com/settings/keys).
2. Ensure you have a Linux machine, on which the git, Golang, and docker have been installed.
   - Ensure the Golang version matches the version defined in `.go-version` file.
   - Ensure non-privileged users can run docker commands, refer to the [Linux postinstall](https://docs.docker.com/engine/install/linux-postinstall/).
   - Ensure there is at least 5GB of free space on your Linux machine.
3. Install gsutil, refer to [gsutil_install](https://cloud.google.com/storage/docs/gsutil_install). When asked about cloud project to use, pick `etcd-development`.
4. Authenticate the image registry, refer to [Authentication methods](https://cloud.google.com/container-registry/docs/advanced-authentication).
   - `gcloud auth login`
   - `gcloud auth configure-docker`
5. Install gh, refer to [GitHub's documentation](https://github.com/cli/cli#installation). Ensure that running `gh auth login` succeeds for the GitHub account you use to contribute to etcd, and that `gh auth status` has a clean exit and doesn't show any issues.

Release steps

1. Raise an issue to publish the release plan, e.g. [issues/17350](https://github.com/etcd-io/etcd/issues/17350).
2. Raise a `kubernetes/org` pull request to temporarily elevate permissions for the GitHub release team.
3. Once permissions are elevated, temporarily relax [branch protections](https://github.com/etcd-io/etcd/settings/branches) to allow pushing changes directly to `release-*` branches in GitHub.
4. Verify you can pass the authentication to the image registries,
 - `docker login gcr.io`
 - `docker login quay.io`
  - If the release person doesn't have access to 1password, one of the owners (@ahrtr, @ivanvc, @jmhbnz, @serathius) needs
 to share the password with them per [this guide](https://support.1password.com/share-items/). See rough steps below,
    - [Sign in](https://team-etcd.1password.com/home) to your account on 1password.com.
    - Click `Your Vault Items` on the right side.
    - Select `Password of quay.io`.
    - Click `Share` on the top right, and set expiration as `1 hour` and only available to the release person using his/her email.
    - Click `Copy Link` then send the link to the release person via slack or email.
5. Clone the etcd repository and checkout the target branch,
 - `git clone --branch release-3.X git@github.com:etcd-io/etcd.git`
6. Run the release script under the repository's root directory, replacing `${VERSION}` with a value without the `v` prefix, i.e. `3.5.13`.
 - `DRY_RUN=false ./scripts/release.sh ${VERSION}`
 - **NOTE:** When doing a pre-release (i.e., a version from the main branch, 3.6.0-alpha.2), you will need to explicitly set the branch to main:

  ```
   DRY_RUN=false BRANCH=main ./scripts/release.sh ${VERSION}
   ```

  It generates all release binaries under the directory `/tmp/etcd-release-${VERSION}/etcd/release/` and images. Binaries are pushed to the Google Cloud bucket
  under project `etcd-development`, and images are pushed to `quay.io` and `gcr.io`.
7. Publish the release page on GitHub
 - Open the **draft** release URL shown by the release script
 - Click the pen button at the top right to edit the release
 - Review that it looks correct, reviewing that the bottom checkboxes are checked depending on the
   release version (v3.4 no checkboxes, v3.5 has the set as latest release checkbox checked,
   v3.6 has the set as pre-release checkbox checked)
 - Then, publish the release
8. Announce to the etcd-dev googlegroup

  Follow the format of previous release emails sent to etcd-dev@googlegroups.com, see an example below. After sending out the email, ask one of the mailing list maintainers to approve the
  email from the pending list. Additionally, label the release email as `Release`.

```text
Hello,
```

etcd v3.4.30 is now public!

https://github.com/etcd-io/etcd/releases/tag/v3.4.30

Thanks to everyone who contributed to the release!

etcd team
```

9. Update the changelog to reflect the correct release date.
10. Paste the release link to the issue raised in Step 1 and close the issue.
11. Restore standard branch protection settings and raise a follow-up `kubernetes/org` pull request to return to least privilege permissions.
12. Crease a new stable branch through `git push origin release-${VERSION_MAJOR}.${VERSION_MINOR}` if this is a new major or minor stable release.
13. Re-generate a new password for quay.io if needed (e.g. shared to a contributor who isn't in the release team, and we should rotate the password at least once every 3 months).

#### Release known issues

1. Timeouts pushing binaries - If binaries fail to fully upload to Google Cloud storage, the script must be re-run using the same command. Any artifacts that are already pushed will be overwritten to ensure they are correct. The storage bucket does not use object versioning so incorrect files cannot remain.

2. Timeouts pushing images - It is rare, although possible for connection timeouts to occur when publishing etcd release images to `quay.io` or `gcr.io`. If this occurs, it is known to be safe to rerun the release script command appending the `--no-upload` flag, and image uploads will gracefully resume.

3. GPG vs SSH signing - The release scripts assume that git tags will be signed with a GPG key. Since 2022 GitHub has supported [signing commits and tags using ssh](https://github.blog/changelog/2022-08-23-ssh-commit-verification-now-supported). Until further release script updates are completed you will need to disable this feature in your `~/.gitconfig` and revert to signing via GPG to perform etcd releases.
# Golang modules

The etcd project (since version 3.5) is organized into multiple [golang modules](https://golang.org/ref/mod) hosted in a [single repository](https://golang.org/ref/mod#vcs-dir).

![modules graph](modules.svg)

There are the following modules:

- **go.etcd.io/etcd/api/v3** - contains API definitions (like protos & proto-generated libraries) that defines communication protocol between etcd clients and servers.

- **go.etcd.io/etcd/pkg/v3** - a collection of utility packages used by etcd without being specific to etcd itself. A package belongs here
```

only if it could possibly be moved out into its own repository in the future.
Please avoid adding here code that has a lot of dependencies on its own, as
they automatically become dependencies of the client library
(that we want to keep lightweight).

- **go.etcd.io/etcd/client/v3** - client library used to contact etcd over
the network (grpc). Recommended for all new usage of etcd.

- **go.etcd.io/raft/v3**
- implementation of distributed consensus
protocol. Should have no etcd specific code. Hosted in a separate repository:
https://github.com/etcd-io/raft.

- **go.etcd.io/etcd/server/v3** - etcd implementation.
The code in this package is internal to etcd and should not be consumed
by external projects. The package layout and API can change within the minor versions.

- **go.etcd.io/etcd/etcdctl/v3** - a command line tool to access and manage etcd.

- **go.etcd.io/etcd/tests/v3** - a module that contains all integration tests of etcd.
  Notice: All unit tests (fast and not requiring cross-module dependencies)
  should be kept in the local modules of the code under the test.

- **go.etcd.io/bbolt** - implementation of persistent b-tree.
  Hosted in a separate repository: https://github.com/etcd-io/bbolt.

Operations

1. All etcd modules should be released in the same versions, e.g.
  `go.etcd.io/etcd/client/v3@v3.5.10` must depend on `go.etcd.io/etcd/api/v3@v3.5.10`.

   The consistent updating of versions can be performed using:
  ```shell script
  % DRY_RUN=false TARGET_VERSION="v3.5.10" ./scripts/release_mod.sh update_versions
  ```
2. The released modules should be tagged according to https://golang.org/ref/mod#vcs-version rules,
  i.e. each module should get its own tag.
  The tagging can be performed using:
  ```shell script
  % DRY_RUN=false REMOTE_REPO="origin" ./scripts/release_mod.sh push_mod_tags
  ```

3. All etcd modules should depend on the same versions of underlying dependencies.
  This can be verified using:
  ```shell script
  % PASSES="dep" ./test.sh
  ```

4. The go.mod files must not contain dependencies not being used and must
  conform to `go mod tidy` format.
  This is being verified by:
  ```
  % PASSES="mod_tidy" ./test.sh
  ```

5. To trigger actions across all modules (e.g. auto-format all files), please
  use/expand the following script:
  ```shell script
  % ./scripts/fix.sh
  ```

###
 Future

As a North Star, we would like to evaluate etcd modules towards the following model:

![modules graph](modules-future.svg)

This assumes:
 - Splitting etcdmigrate/etcdadm out of etcdctl binary.
   Thanks to this etcdctl would become clearly a command-line wrapper
   around network client API,
   while etcdmigrate/etcdadm would support direct physical operations on the
   etcd storage files.
 - Splitting etcd-proxy out of ./etcd binary, as it contains more experimental code
   so carries additional risk & dependencies.
 - Deprecation of support for v2 protocol.
Reporting bugs

If any part of the etcd project has bugs or documentation mistakes, please let us know by [opening an issue][etcd-issue]. We treat bugs and mistakes very seriously and believe no issue is too small. Before creating a bug report, please check that an issue reporting the same problem does not already exist.

To make the bug report accurate and easy to understand, please try to create bug reports that are:

- Specific. Include as many details as possible: which version, what environment, what configuration, etc. If the bug is related to running the etcd server, please attach the etcd log (the starting log with the etcd configuration is especially important).

- Reproducible. Include the steps to reproduce the problem. We understand some issues might be hard to reproduce, please include the steps that might lead to the problem. If possible, please attach the affected etcd data dir and stack trace to the bug report.

- Isolated. Please try to isolate and reproduce the bug with

minimum dependencies. It would significantly slow down the speed to fix a bug if too many dependencies are involved in a bug report. Debugging external systems that rely on etcd is out of scope, but we are happy to provide guidance in the right direction or help with using etcd itself.

- Unique. Do not duplicate existing bug reports.

- Scoped. One bug per report. Do not follow up with another bug inside one report.

It may be worthwhile to read [Elika Etemads article on filing good bug reports][filing-good-bugs] before creating a bug report.

We might ask for further information to locate a bug. A duplicated bug report will be closed.

Frequently asked questions

How to get a stack trace

``` bash
$ kill -QUIT $PID
```

How to get the etcd version

``` bash
$ etcd --version
```

How to get etcd configuration and log when it runs as systemd service etcd2.service

``` bash
$ sudo systemctl cat etcd2
$ sudo journalctl -u etcd2
```

Due to an upstream systemd bug, journald
may miss the last few log lines when its processes exit. If journalctl says etcd stopped without a fatal or panic message, try `sudo journalctl -f -t etcd2` to get the full log.

[etcd-issue]: https://github.com/etcd-io/etcd/issues/new
[filing-good-bugs]: http://fantasai.inkedblade.net/style/talks/filing-good-bugs/
Community membership

This doc outlines the various responsibilities of contributor roles in etcd.

Role	Responsibilities	Requirements	Defined by

Member	Active contributor in the community	Sponsored by 2 reviewers and multiple contributions	etcd GitHub org member
Reviewer	Review contributions from other members	History of review and authorship	[OWNERS] file reviewer entry
Maintainer	Set direction and priorities for the project	Demonstrated responsibility and excellent technical judgement	[OWNERS] file approver entry

New contributors

New contributors should be welcomed to the community by existing members,
helped with
PR workflow, and directed to relevant documentation and
communication channels.

Established community members

Established community members are expected to demonstrate their adherence to the
principles in this document, familiarity with project organization, roles,
policies, procedures, conventions, etc., and technical and/or writing ability.
Role-specific expectations, responsibilities, and requirements are enumerated
below.

Member

Members are continuously active contributors to the community. They can have
issues and PRs assigned to them. Members are expected to remain active
contributors to the community.

Defined by: Member of the etcd GitHub organization.

Requirements

- Enabled [two-factor authentication] on their GitHub account
- Have made multiple contributions to the project or community. Contribution may include, but is not limited to:
  - Authoring or reviewing PRs on GitHub. At least one PR must be **merged**.
  - Filing or commenting on issues on
GitHub
  - Contributing to community discussions (e.g. meetings, Slack, email discussion
    forums, Stack Overflow)
- Subscribed to [etcd-dev@googlegroups.com](https://groups.google.com/g/etcd-dev)
- Have read the [contributor guide]
- Sponsored by two active maintainers or reviewers.
  - Sponsors must be from multiple member companies to demonstrate integration across the community.
  - With no objections from other maintainers
- Open a [membership nomination] issue against the `kubernetes/org` repo
  - Ensure your sponsors are @mentioned on the issue
  - Make sure that the list of contributions included is representative of your work on the project.
- Members can be removed by a supermajority of the maintainers or can resign by notifying

the maintainers.

Responsibilities and privileges

- Responsive to issues and PRs assigned to them
- Granted "triage access" to etcd project
- Active owner of code they have contributed (unless ownership is explicitly transferred)
  - Code is well-tested
  - Tests consistently pass
  - Addresses bugs or issues discovered after code is accepted

Note: Members who frequently contribute code are expected to proactively
perform code reviews and work towards becoming a *reviewer*.

Reviewers

Reviewers are contributors who have demonstrated greater skill in
reviewing the code from other contributors. They are knowledgeable about both
the codebase and software engineering principles. Their LGTM counts towards
merging a code change into the project. A reviewer is generally on the ladder towards
maintainership.

Defined by: *reviewers* entry in the [OWNERS] file.

Requirements

- member for at least 3 months.
- Primary reviewer for at least 5 PRs to the codebase.
- Reviewed or contributed at least 20 substantial PRs to the codebase.
- Knowledgeable about the codebase.
- Sponsored by two active maintainers.
  - Sponsors must be from multiple member companies to demonstrate integration across the community.
  - With no objections from other maintainers
- Reviewers can be removed by a supermajority of the maintainers or can resign by notifying the maintainers.

Responsibilities and privileges

- Code reviewer status may be a precondition to accepting large code contributions
- Responsible for project quality control via code reviews
  - Focus on code quality and correctness, including testing and factoring
  - May also review for more holistic issues, but not a requirement
- Expected to be responsive to review requests
- Assigned PRs to review related to area of expertise
- Assigned test bugs related to area of expertise
- Granted "triage access" to etcd project

Maintainers

Maintainers are first and foremost contributors who have shown they
are committed to the long-term success of a project. Maintainership is about building
trust with the current maintainers and being a person that they can
depend on to make decisions in the best interest of the project in a consistent
manner.

Defined by: *approvers* entry in the [OWNERS] file.

Requirements

- Deep understanding of the technical goals and direction of the project
- Deep understanding of the technical domain of the project
- Sustained contributions to design and direction by doing all of:
  - Authoring and reviewing proposals
  - Initiating, contributing, and resolving discussions (emails, GitHub issues, meetings)
  - Identifying subtle or complex issues in the designs and implementation of PRs
- Directly contributed to the project through implementation and/or review
- Sponsored by two active maintainers and elected by supermajority
  - Sponsors must be from multiple member companies to demonstrate integration across the community.
- To become a maintainer send an email with your candidacy to etcd-maintainers-private@googlegroups.com
  - Ensure your sponsors are @mentioned in the email
  - Include a list of contributions representative of your work on the project.
  -
Existing maintainers vote will privately and respond to the email with either acceptance or feedback for suggested improvement.
- With your membership approved you are expected to:
 - Open a PR and add an entry to the [OWNERS] file
 - Subscribe to etcd-maintainers@googlegroups.com and etcd-maintainers-private@googlegroups.com
 - Request to join [etcd-maintainer teams of etcd organization of GitHub](https://github.com/orgs/etcd-io/teams/maintainers-etcd)
 - Request to join the private slack channel for etcd maintainers on [kubernetes slack](http://slack.kubernetes.io/)
 - Request access to etcd-development GCP project where we publish releases
 - Request access to passwords shared between maintainers

Responsibilities and privileges

- Make and approve technical design decisions
- Set technical direction and priorities
- Define milestones and releases
- Mentor and guide reviewers, and contributors to the project.
- Participate when called upon in the [security disclosure and
release process]
- Ensure the continued health of the project
  - Adequate test coverage to confidently release
  - Tests are passing reliably (i.e. not flaky) and are fixed when they fail
- Ensure a healthy process for discussion and decision-making is in place.

- Work with other maintainers to maintain the project's overall health and success holistically

Retiring

Life priorities, interests, and passions can change. Maintainers can retire and
move to [emeritus maintainers]. If a maintainer needs to step down, they should
inform other maintainers and, if possible, help find someone to pick up the related
work. At the very least, ensure the related work can be continued. Afterward,
they can remove themselves from the list of existing maintainers.

If a maintainer has not been performing their duties for 12 months,
they can be removed by other maintainers. In that case, the inactive maintainer will
be first notified via an email. If the situation doesn't improve, they will be
removed.
If an emeritus maintainer wants to regain an active role, they can do
so by renewing their contributions. Active maintainers should welcome such a move.
Retiring other maintainers or regaining the status should require the approval
of at least two active maintainers.

Acknowledgements

Contributor roles and responsibilities were written based on [Kubernetes community membership]

[OWNERS]: /OWNERS
[contributor guide]: /CONTRIBUTING.md
[membership nomination]: https://github.com/kubernetes/org/issues/new?assignees=&labels=area%2Fgithub-membership&projects=&template=membership.yml&title=REQUEST%3A+New+membership+for+%3Cyour-GH-handle%3E
[Kubernetes community membership]: https://github.com/kubernetes/community/blob/master/community-membership.md
[emeritus maintainers]: /README.md#etcd-emeritus-maintainers
[security disclosure and release process]: /security/README.md
[two-factor authentication]: https://docs.github.com/en/authentication/securing-your-account-with-two-factor-authentication-2fa/about-two-factor-authentication

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Logging Conventions

etcd uses the [zap][zap] library for logging application output categorized into *levels*. A log message's level is determined according to these conventions:

* Debug: Everything is still fine, but even common operations may be logged, and less helpful but more quantity of notices. Usually not used in production.
 * Examples:
   * Send a normal message to a remote peer
   * Write a log entry to disk

* Info: Normal, working log information, everything is fine, but helpful notices for auditing or common operations. Should rather not be logged more frequently than once per a few seconds in a normal server's operation.
 * Examples:
   * Startup configuration
   * Start to do a snapshot

* Warning: (Hopefully) Temporary conditions that may cause errors, but may work fine. A replica disappearing (that may reconnect) is a warning.
 * Examples:
   * Failure to send a raft message to a remote peer
   * Failure to receive heartbeat message within the configured election
 timeout

* Error: Data has been lost, a request has failed for a bad reason, or a required resource has been lost.
 * Examples:
   * Failure to allocate disk space for WAL

* Panic: Unrecoverable or unexpected error situation that requires stopping execution.
 * Examples:
   * Failure to create the database

* Fatal: Unrecoverable or unexpected error situation that requires immediate exit. Mostly used in the test.
 * Examples:
   * Failure to find the data directory
   * Failure to run a test function

[zap]: https://github.com/uber-go/zap
Dependency management

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- **[Stable branches](#stable-branches)**
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- **[Core dependencies mappings](#core-dependencies-mappings)**

Main branch

The dependabot is enabled & [configured](https://github.com/etcd-io/etcd/blob/main/.github/dependabot.yml) to manage dependencies for etcd `main` branch. But dependabot doesn't work well for multi-module repository like `etcd`,
see [dependabot-core/issues/6678](https://github.com/dependabot/dependabot-core/issues/6678).
Usually, human intervention is required
each time when dependabot automatically opens some PRs to bump dependencies.
Please see the guidance below.

Dependencies used in workflows

The PRs that automatically bump dependencies (see examples below) used in workflows are fine and can be approved & merged directly as long as all checks are successful.

- [build(deps): bump github/codeql-action from 2.2.11 to 2.2.12](https://github.com/etcd-io/etcd/pull/15736)
- [build(deps): bump actions/checkout from 3.5.0 to 3.5.2](https://github.com/etcd-io/etcd/pull/15735)
- [build(deps): bump ossf/scorecard-action from 2.1.2 to 2.1.3](https://github.com/etcd-io/etcd/pull/15607)

Bumping order

When multiple etcd modules depend on the same package, please bump the package version for all the modules in the correct order. The rule is simple:
if module A depends on module B, then bump the dependency for module B before module A. If the two modules do not depend on each other, then
it doesn't matter to bump which module first. For
example, multiple modules depend on `github.com/spf13/cobra`, so we need to bump the dependency
in the following order,

- go.etcd.io/etcd/pkg/v3
- go.etcd.io/etcd/server/v3
- go.etcd.io/etcd/etcdctl/v3
- go.etcd.io/etcd/etcdutl/v3
- go.etcd.io/etcd/tests/v3
- go.etcd.io/etcd/v3
- go.etcd.io/etcd/tools/v3

For more details about etcd Golang modules, please check <https://etcd.io/docs/next/dev-internal/modules>

Note the module `go.etcd.io/etcd/tools/v3` doesn't depend on any other modules, nor by any other modules, so it doesn't matter when to bump dependencies for it.

Steps to bump a dependency

Use the `github.com/spf13/cobra` as an example, follow the steps below to bump it from 1.6.1 to 1.7.0 for module `go.etcd.io/etcd/etcdctl/v3`,

```bash
cd ${ETCD_ROOT_DIR}/etcdctl
go get github.com/spf13/cobra@v1.7.0
go mod tidy
cd ..
./scripts/fix.sh
```

Execute the same steps for all other modules. When you finish bumping the dependency for all modules, then commit the change,

```bash
git
 add .
git commit --signoff -m "dependency: bump github.com/spf13/cobra from 1.6.1 to 1.7.0"
```

Please close the related PRs which were automatically opened by dependabot.

When you bump multiple dependencies in one PR, it's recommended to create a separate commit for each dependency. But it isn't a must; for example,
you can get all dependencies bumping for the module `go.etcd.io/etcd/tools/v3` included in one commit.

Troubleshooting

In an event of bumping the version of protoc, protoc plugins or grpc-gateway, it might change `*.proto` file which can result in the following error:

```bash
[0;31mFAIL: 'genproto' FAILED at Wed Jul 31 07:09:08 UTC 2024
make: *** [Makefile:134: verify-genproto] Error 255
```

To fix the above error, run the following script from the root of etcd repository:

```bash
./scripts/genproto.sh
```

Indirect dependencies

Usually, we don't bump a dependency if all modules just indirectly depend on it, such as `github.com/go-logr/logr`.

If
an indirect dependency (e.g. `D1`) causes any CVE or bugs that affect etcd, usually the module (e.g. `M1`, not part of etcd, but used by etcd)
which depends on it should bump the dependency (`D1`), and then etcd just needs to bump `M1`. However, if the module (`M1`) somehow doesn't
bump the problematic dependency, then etcd can still bump it (`D1`) directly following the same steps above. But as a long-term solution, etcd should
try to remove the dependency on such module (`M1`) that lack maintenance.

For mixed cases, in which some modules directly while others indirectly depend on a dependency, we have multiple options,

- Bump the dependency for all modules, no matter it's direct or indirect dependency.
- Bump the dependency only for modules that directly depend on it.

We should try to follow the first way, and temporarily fall back to the second one if we run into any issue on the first way. Eventually we
should fix the issue and ensure all modules depend on the same version of the
dependency.

Known incompatible dependency updates

arduino/setup-protoc

Please refer to [build(deps): bump arduino/setup-protoc from 1.3.0 to 2.0.0](https://github.com/etcd-io/etcd/pull/16016)

Rotation worksheet

The dependabot scheduling interval is weekly; it means dependabot will automatically raise a bunch of PRs per week.
Usually, human intervention is required each time. We have a [rotation worksheet](https://docs.google.com/spreadsheets/d/1jodHIO7Dk2VWTs1IRnfMFaRktS9IH8XRyifOnPdSY8I/edit#gid=1394774387),
and everyone is welcome to participate; you just need to register your name in the worksheet.

Stable branches

Usually, we don't proactively bump dependencies for stable releases unless there are any CVEs or bugs that affect etcd.

If we have to do it, then follow the same guidance above. Note that there is no `./scripts/fix.sh` in release-3.4, so no need to
execute it for 3.4.

Golang versions

The etcd project aims to maintain a development branch that
 is on the latest [Go version](https://go.dev/dl), ideally, this will align with the Go version in use for Kubernetes project development. For an example of how to update etcd to a new minor release of Go refer to issue <https://github.com/etcd-io/etcd/issues/16393> and the linked pull requests.

Suggested steps for performing a minor version upgrade for the etcd development branch:

1. Carefully review new Go version release notes and potentially related blog posts for any deprecations, performance impacts, or other considerations.
2. Create a GitHub issue to signal intent to upgrade and invite discussion, for example, <https://github.com/etcd-io/etcd/issues/16393>.
3. Complete the upgrade locally in your development environment by editing `.go-version` and running `make fix`.
4. Run performance benchmarks locally to compare before and after.
5. Raise a pull request for the changes, for example, <https://github.com/etcd-io/etcd/pull/16394>.

Stable etcd release branches will be maintained
 to stay on the latest patch release of a supported Go version. Upgrading minor versions will be completed before the minor version in use currently is no longer supported. Refer to the [Go release
policy](https://go.dev/doc/devel/release).

For an example of how to update etcd to a new patch release of Go refer to issue <https://github.com/etcd-io/etcd/issues/16343> and the linked pull requests.

References:

- <https://github.com/kubernetes/sig-release/blob/master/release-engineering/handbooks/go.md>

Core dependencies mappings

[bbolt](https://github.com/etcd-io/bbolt) and [raft](https://github.com/etcd-io/raft) are two core dependencies of etcd.

Both etcd 3.4.x and 3.5.x depend on bbolt 1.3.x, and etcd 3.6.x (`main` branch) depends on bbolt 1.4.x.

raft is included in the etcd repository for release-3.4 and release-3.5 branches, so etcd 3.4.x and 3.5.x do not depend on any
external raft module. We moved raft into [a separate repository](https://github.com/etcd-io/raft) starting
 from 3.6 (`main` branch), and the first raft
release will be v3.6.0, so etcd 3.6.x will depend on raft 3.6.x.

Please see the table below:

etcd versions	bbolt versions	raft versions
3.4.x	v1.3.x	N/A

| 3.5.x | v1.3.x | N/A |
| 3.6.x | v1.4.x | v3.6.x |

1.152 golang-org-x-exp 0.0.0-20250531010427-b6e5de432a8b

1.152.1 Available under license :

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1.153 google-golang-org-genproto-googleapis-api 0.0.0-20250603155806-513f23925822

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1.154 etcd-client 3.6.0

1.154.1 Available under license :

Features

This document provides an overview of etcd features and general development guidelines for adding and deprecating them. The project maintainers can override these guidelines per the need of the project following the project governance.

Overview

The etcd features fall into three stages, experimental, stable, and unsafe.

Experimental

Any new feature is usually added as an experimental feature. An experimental feature is characterized as below:
- Might be buggy due to a lack of user testing. Enabling the feature may not work as expected.
- Disabled by default when added initially.
- Support for such a feature may be dropped at any time without notice
  - Feature-related issues may be given lower priorities.
  - It can be removed in the next minor or major release without following the feature deprecation policy unless it graduates to a stable future.

Stable

A stable feature is characterized as below:
- Supported as part of the supported releases of etcd.
-
May be enabled by default.
- Discontinuation of support must follow the feature deprecation policy.

Unsafe

Unsafe features are rare and listed under the `Unsafe feature:` section in the etcd usage documentation. By default, they are disabled. They should be used with caution following documentation. An unsafe feature can be removed in the next minor or major release without following the feature deprecation policy.

Development Guidelines

Adding a new feature

Any new enhancements to the etcd are typically added as an experimental feature. The general development requirements are listed below. They can be somewhat flexible depending on the scope of the feature and review discussions and will evolve over time.
- Open an issue
  - It must provide a clear need for the proposed feature.
  - It should list development work items as checkboxes. There must be one work item towards future graduation to a stable future.
  - Label the issue with `type/feature` and `experimental`.
  - Keep the issue open for tracking purposes until a decision is made on graduation.
- Open a Pull Request (PR)
  - Provide unit tests. Integration tests are also recommended as possible.
  - Provide robust e2e test coverage. If the feature being added is complicated or quickly needed, maintainers can decide to go with e2e tests for basic coverage initially and have robust coverage added at a later time before the feature graduation to the stable feature.
  - Provide logs for proper debugging.
  - Provide metrics and benchmarks as needed.
  - The Feature should be disabled by default.
  - Any configuration flags related to the implementation of the feature must be prefixed with `experimental` e.g. `--experimental-feature-name`.
  - Add a CHANGELOG entry.
- At least two maintainers must approve feature requirements and related code changes.

Graduating an Experimental feature to Stable

It is important that experimental features don't get stuck in that stage.
They should be revisited and moved to the stable stage following the graduation steps as described here.

Locate graduation candidate
Decide if an experimental feature is ready for graduation to the stable stage.
- Find the issue that was used to enable the experimental feature initially. One way to find such issues is to search for issues with `type/feature` and `experimental` labels.
- Fix any known open issues against the feature.
- Make sure the feature was enabled for at least one previous release. Check the PR(s) reference from the issue to see when the feature-related code changes were merged.

Provide implementation
If an experimental feature is found ready for graduation to the stable stage, open a Pull Request (PR) with the following changes.
- Add robust e2e tests if not already provided.
- Add a new stable feature flag identical to the experimental feature flag but without the `--experimental` prefix.
- Deprecate the experimental feature following the [feature deprecation
policy](#Deprecating-a-feature).
- Implementation must ensure that both the graduated and deprecated experimental feature flags work as expected. Note that both these flags will co-exist for the timeframe described in the feature deprecation policy.
- Enable the graduated feature by default if needed.

At least two maintainers must approve the work. Patch releases should not be considered for graduation.

Deprecating a feature

Experimental
An experimental feature deprecates when it graduates to the stable stage.
- Add a deprecation message in the documentation of the experimental feature with a recommendation to use a related stable feature. e.g. `DEPRECATED. Use <feature-name> instead.`
- Add a `deprecated` label in the issue that was initially used to enable the experimental feature.

Stable
As the project evolves, a stable feature may sometimes need to be deprecated and removed. Such a situation should be handled using the steps below:
- Create an issue for tracking
purposes.
- Add a deprecation message in the feature usage documentation before a planned release for feature deprecation. e.g. `To be deprecated in <release>.`. If a new feature replaces the `To be deprecated` feature, then also provide a message saying so. e.g. `Use <feature-name> instead.`.
- Deprecate the feature in the planned release with a message as part of the feature usage documentation. e.g. `DEPRECATED`. If a new feature replaces the deprecated feature, then also provide a message saying so. e.g. `DEPRECATED. Use <feature-name> instead.`.
- Add a `deprecated` label in the related issue.

Remove the deprecated feature in the following release. Close any related issue(s). At least two maintainers must approve the work. Patch releases should not be considered for deprecation.
Set up the local cluster

For testing and development deployments, the quickest and easiest way is to configure a local cluster. For a production deployment, refer to the [clustering][clustering] section.

Local standalone cluster

Starting a cluster

Run the following to deploy an etcd cluster as a standalone cluster:

```
$ ./etcd
...
```

If the `etcd` binary is not present in the current working directory, it might be located either at `$GOPATH/bin/etcd` or at `/usr/local/bin/etcd`. Run the command appropriately.

The running etcd member listens on `localhost:2379` for client requests.

Interacting with the cluster

Use `etcdctl` to interact with the running cluster:

1. Store an example key-value pair in the cluster:

```
$ ./etcdctl put foo bar
OK
```

If OK is printed, storing the key-value pair is successful.

2. Retrieve the value of `foo`:

```
$ ./etcdctl get foo
bar
```

If `bar` is returned, interaction with the etcd
cluster is working as expected.

Local multi-member cluster

Starting a cluster

A `Procfile` at the base of the etcd git repository is provided to easily configure a local multi-member cluster. To start a multi-member cluster, navigate to the root of the etcd source tree and perform the following:

1. Install `goreman` to control Procfile-based applications:

```
$ go install github.com/mattn/goreman@latest
```

The installation will place executables in the $GOPATH/bin. If $GOPATH environment variable is not set, the tool will be installed into the $HOME/go/bin. Make sure that $PATH is set accordingly in your environment.

2. Start a cluster with `goreman` using etcd's stock Procfile:

```
$ goreman -f Procfile start
```

The members start running. They listen on `localhost:2379`, `localhost:22379`, and `localhost:32379` respectively for client requests.

Interacting with the cluster

Use `etcdctl` to interact with the running cluster:

1. Print
the list of members:

```
$ etcdctl --write-out=table --endpoints=localhost:2379 member list
```

The list of etcd members is displayed as follows:

```
+------------------+---------+--------+-----------------------+-----------------------+
|        ID        | STATUS  |  NAME  |      PEER ADDRS       |     CLIENT ADDRS      |
+------------------+---------+--------+-----------------------+-----------------------+
| 8211f1d0f64f3269 | started | infra1 | http://127.0.0.1:2380  | http://127.0.0.1:2379  |
| 91bc3c398fb3c146 | started | infra2 | http://127.0.0.1:22380 | http://127.0.0.1:22379 |
| fd422379fda50e48 | started | infra3 | http://127.0.0.1:32380 | http://127.0.0.1:32379 |
+------------------+---------+--------+-----------------------+-----------------------+
```

2. Store an example key-value pair in the cluster:

```
$ etcdctl put foo bar
```

```
OK
```

If OK is printed, storing the key-value pair is successful.

###
Testing fault tolerance

To exercise etcd's fault tolerance, kill a member and attempt to retrieve the key.

1. Identify the process name of the member to be stopped.

The `Procfile` lists the properties of the multi-member cluster. For example, consider the member with the process name, `etcd2`.

2. Stop the member:

```
# kill etcd2
$ goreman run stop etcd2
```

3. Store a key:

```
$ etcdctl put key hello
OK
```

4. Retrieve the key that is stored in the previous step:

```
$ etcdctl get key
hello
```

5. Retrieve a key from the stopped member:

```
$ etcdctl --endpoints=localhost:22379 get key
```

The command should display an error caused by connection failure:

```
2017/06/18 23:07:35 grpc: Conn.resetTransport failed to create client transport: connection error: desc = "transport: dial tcp 127.0.0.1:22379: getsockopt: connection refused"; Reconnecting to "localhost:22379"
Error:  grpc:
```

timed out trying to connect
```

6. Restart the stopped member:

```
$ goreman run restart etcd2
```

7. Get the key from the restarted member:

```
$ etcdctl --endpoints=localhost:22379 get key
hello
```

Restarting the member re-establishs the connection. `etcdctl` will now be able to retrieve the key successfully. To learn more about interacting with etcd, read [interacting with etcd section][interacting].

[clustering]: https://etcd.io/docs/latest/op-guide/clustering/
[interacting]: https://etcd.io/docs/latest/dev-guide/interacting_v3/
Branch management

Guide

* New development occurs on the [main branch][main].
* The main branch should always have a green build!
* Backwards-compatible bug fixes should target the main branch and subsequently be ported to stable branches.
* Once the main branch is ready for release, it will be tagged and become the new stable branch.

The etcd team has adopted a *rolling release model* and supports two stable versions of etcd.

Main branch

The `main` branch is our development branch. All new features land here first.

To try new and experimental features, pull `main` and play with it. Note that `main` may not be stable because new features may introduce bugs.

Before the release of the next stable version, feature PRs will be frozen. A [release manager](./release.md#release-management) will be assigned to the major/minor version and will lead the etcd community in testing, bug-fix, and documentation of the release for one to two weeks.

Stable branches

All branches with
the prefix `release-` are considered _stable_ branches.

After every minor release (semver.org), we will have a new stable branch for that release,
```

managed by a [patch release manager](./release.md#release-management). We will keep fixing the backward-compatible bugs for the latest two stable releases. A _patch_ release to each supported release branch, incorporating any bug fixes, will be once every two weeks, given any patches.

[main]: https://github.com/etcd-io/etcd/tree/main
Issue triage guidelines

Purpose

Speed up issue management.

The `etcd` issues are listed at <https://github.com/etcd-io/etcd/issues> and are identified with labels. For example, an issue that is identified as a bug will be set to the label `type/bug`.

The etcd project uses labels to indicate common attributes such as `area`, `type`, and `priority` of incoming issues.

New issues will often start without any labels, but typically `etcd` maintainers, reviewers, and members will add labels by following these triage guidelines. The detailed list of labels can be found at <https://github.com/etcd-io/etcd/labels>.

Scope

This document serves as the primary guidelines for triaging incoming issues in `etcd`.

All contributors are encouraged and welcome to help manage issues which will help reduce the burden on project maintainers, though the work and responsibilities discussed in this document are created with `etcd` project reviewers and members in mind as these individuals will have
triage access to the etcd project which is a requirement for actions like applying labels or closing issues.

Refer to [etcd community membership](https://github.com/etcd-io/etcd/blob/main/Documentation/contributor-guide/community-membership.md) for guidance on becoming an etcd project member or reviewer.

Step 1 - Find an issue to triage

To get started you can use the following recommended issue searches to identify issues that are in need of triage:

* [Issues that have no labels](https://github.com/etcd-io/etcd/issues?q=is%3Aissue+is%3Aopen+sort%3Aupdated+no%3Alabel)
* [Issues created recently](https://github.com/etcd-io/etcd/issues?q=is%3Aissue+is%3Aopen+)
* [Issues not assigned but linked pr](https://github.com/etcd-io/etcd/issues?q=is%3Aopen+is%3Aissue+no%3Aassignee+linked%3Apr)
* [Issues with no comments](https://github.com/etcd-io/etcd/issues?q=is%3Aopen+is%3Aissue+comments%3A0+)
* [Issues with help wanted](https://github.com/etcd-io/etcd/issues?q=is%3Aopen+is%3Aissue+label%3A%22help+wanted%22+)

##
Step 2 - Check the issue is valid

Before we start adding labels or trying to work out a priority, our first triage step needs to be working out if the issue actually belongs to the etcd project and is not a duplicate.

Issues that don't belong to etcd

Sometimes issues are reported that belong to other projects that `etcd` use. For example, `grpc` or `golang` issues. Such issues should be addressed by asking the reporter to open issues in the appropriate other projects.

These issues can generally be closed unless a maintainer and issue reporter see a need to keep it open for tracking purposes. If you have triage permissions please close it, alternatively mention the @etcd-io/members group to request a member with triage access to close the issue.

Duplicate issues

If an issue is a duplicate, add a comment stating so along with a reference for the original issue and if you have triage permissions please close it, alternatively mention the @etcd-io/members
group to request a member with triage access close the issue.

Step 3 - Apply the appropriate type of label

Adding a `type` label to an issue helps create visibility on the health of the project and helps contributors identify potential priorities, i.e. addressing existing bugs or test flakes before implementing new features.

Support requests

As a general rule, the focus for etcd support is to address common themes in a broad way that helps all users, i.e. through channels like known issues, frequently asked questions, and high-quality documentation. To make the best use of project members time we should avoid providing 1:1 support if a broad approach is available.

Some people mistakenly use our GitHub bug report or feature request templates to file support requests. Usually, they are asking for help operating or configuring some aspect of etcd. Support requests for etcd should instead be raised as [discussions](https://github.com/etcd-io/etcd/discussions).

Common
types of support requests are:

1. Questions about configuring or operating existing well-documented etcd features, for example, <https://github.com/etcd-io/etcd/issues/15945>. Note - If an existing feature is not well documented please apply the `area/documentation` label and propose documentation improvements that would prevent future users from stumbling on the problem again.

2. Bug reports or questions about unsupported versions of etcd, for example <https://github.com/etcd-io/etcd/issues/15796>. When responding to these issues please refer to our [supported versions documentation](https://etcd.io/docs/latest/op-guide/versioning) and encourage the reporter to upgrade to a recent patch release of a supported version as soon as possible. We should limit the effort supporting users that do not make the effort to run a supported version of etcd or ensure their version is patched.

3. Bug reports that do not provide a complete list of steps to reproduce the issue and/or contributors

are not able to reproduce the issue, for example, <https://github.com/etcd-io/etcd/issues/15740>. We should limit the effort we put into reproducing issues ourselves and motivate users to provide the necessary information to accept the bug report.

4. General questions that are filed using feature request or bug report issue templates, for example, <https://github.com/etcd-io/etcd/issues/15914>. Note - These types of requests may surface good additions to our [frequently asked questions](https://etcd.io/docs/v3.5/faq).

If you identify that an issue is a support request please:

1. Add the `type/support` or `type/question` label.

2. Add the following comment to inform the issue creator that discussions should be used instead and that this issue will be converted to a discussion.

> Thank you for your question, this support issue will be moved to our [Discussion Forums](https://github.com/etcd-io/etcd/discussions).
>
> We are trying to consolidate the channels to which questions for help/support are posted so that we can improve our efficiency in responding to your requests, and make it easier for you to find answers to frequently asked questions and how to address common use cases.
>
> We regularly see messages posted in multiple forums, with the full response thread only in one place or, worse, spread across multiple forums. Also, the large volume of support issues on GitHub is making it difficult for us to use issues to identify real bugs.
>
> Members of the etcd community use Discussion Forums to field support requests. Before posting a new question, please search these for answers to similar questions, and also familiarize yourself with:
>
> 1. [user documentation](https://etcd.io/docs/latest)
> 2. [frequently asked questions](https://etcd.io/docs/v3.5/faq)
>
> Again, thanks for using etcd and raising this question.
>
> The etcd team

3. Finally, click `Convert to discussion` on the right-hand panel, selecting the appropriate discussion category.

Bug reports

If an issue has been raised as a bug it should already have the `type/bug` label, however, if this is missing for an issue you determine to be a bug please add the label manually.

The next step is to validate if the issue is indeed a bug. If not, add a comment with the findings and close the trivial issue. For non-trivial issues, wait to hear back from the issue reporter and see if there is any objection. If the issue reporter does not reply in 30 days, close the issue.

If the problem can not be reproduced or requires more information, leave a comment for the issue reporter as soon as possible while the issue is fresh for the issue reporter.

Feature requests

New feature requests should be created via the etcd feature request template and in theory already have the `type/feature` label, however, if this is missing for an issue you determine to be a feature please add the label manually.

Test flakes

Test flakes
 are a specific type of bug that the etcd project tracks separately as these are a priority to address. These should be created via the test flake template and in theory already have the `type/flake` label, however, if this is missing for an issue you determine to be related to a flaking test please add the label manually.

Step 4 - Define the areas impacted

Adding an `area` label to an issue helps create visibility on which areas of the etcd project require attention and helps contributors find issues to work on relating to their particular skills or knowledge of the etcd codebase.

If an issue crosses multiple domains please add additional `area` labels to reflect that.

Below is a brief summary of the area labels in active use by the etcd project along with any notes on their use:

Label	Notes
area/external	Tracking label for issues raised that are external to etcd.
area/community	
area/raft	
area/clientv3	
area/performance	
area/security	
area/tls	
area/auth	
area/etcdctl	
area/etcdutl	
area/contrib	Not to be confused with `area/community` this label is specifically
used for issues relating to community-maintained scripts or files in the `contrib/` directory which aren't part of the core etcd project.
area/documentation	
area/tooling	Generally used in relation to the third party / external utilities or tools that are used in various stages of the etcd build, test, or release process, for example, tooling to create sboms.
area/testing	
area/robustness-testing	

Step 5 - Prioritise the issue

If an issue lacks a priority label it has not been formally prioritized yet.

Adding a `priority` label helps the etcd project understand what is important and should be worked on now, and conversely, what is not as important and is on the project backlog.

Priority label	What it means	Examples
`priority/critical-urgent`
Maintainers are responsible for making sure that these issues (in their area) are being actively worked oni.e., drop what you're doing. The stuff is burning. These should be fixed before the next release.	user-visible critical bugs in core features broken builds on tier1 supported platforms tests and critical security issues
`priority/important-soon`	Must be staffed and worked on either currently or very soonideally in time for the next release.	
`priority/important-longterm`	Important over the long term, but may not be currently staffed and/or may require multiple releases to complete.	
`priority/backlog`	General agreement that this is a nice-to-have, but no one's available to work on it anytime soon. Community contributions would be most welcome in the meantime, though it might take a while to get them reviewed if reviewers are fully occupied with higher-priority issuesfor example, immediately before a release.	
`priority/awaiting-more-evidence`
Possibly useful, but not yet enough support to actually get it done.	Mostly placeholders for potentially good ideas, so that they don't get completely forgotten, and can be referenced or deduped every time they come up

Step 6 - Support new contributors

As part of the `etcd` triage process once the `kind` and `area` have been determined, please consider if the issue would be suitable for a less experienced contributor. The `good first issue` label is a subset of the `help wanted` label, indicating that members have committed to providing extra assistance for new contributors. All `good first issue` items also have the `help wanted` label.

Help wanted

Items marked with the `help wanted` label need to ensure that they meet these criteria:

* **Low Barrier to Entry** - It should be easy for new contributors.

* **Clear** - The task is agreed upon and does not require further discussions in the community.

* **Goldilocks priority** - The priority
 should not be so high that a core contributor should do it, but not too low that it isnt useful enough for a core contributor to spend time reviewing it, answering questions, helping get it into a release, etc.

Good first issue

Items marked with `good first issue` are intended for first-time contributors. It indicates that members will keep an eye out for these pull requests and shepherd it through our processes.

New contributors should not be left to find an approver, ping for reviews, decipher test commands, or identify that

their build failed due to a flake. It is important to make new contributors feel welcome and valued. We should assure them that they will have an extra level of help with their first contribution.

After a contributor has successfully completed one or two `good first issue` items, they should be ready to move on to `help wanted` items.

* **No Barrier to Entry** - The task is something that a new contributor can tackle without advanced setup or domain knowledge.

*
Solution Explained - The recommended solution is clearly described in the issue.

* **Gives Examples** - Link to examples of similar implementations so new contributors have a reference guide for their changes.

* **Identifies Relevant Code** - The relevant code and tests to be changed should be linked in the issue.

* **Ready to Test** - There should be existing tests that can be modified, or existing test cases fit to be copied. If the area of code doesnt have tests, before labeling the issue, add a test fixture. This prep often makes a great help wanted task!

Step 7 - Follow up

Once initial triage has been completed, issues need to be re-evaluated over time to ensure they don't become stale incorrectly.

Track important issues

If an issue is at risk of being closed by the stale bot in the future, but is an important issue for the etcd project, then please apply the `stage/tracked` label and remove any `stale` labels that exist. This will ensure the project does not lose sight of the issue.

Close incomplete issues

Issues that lack enough information from the issue reporter should be closed if the issue reporter does not provide information in 30 days. Issues can always be re-opened at a later date if new information is provided.

Check for incomplete work

If an issue owned by a developer has no pull request created in 30 days, contact the issue owner and kindly ask about the status of their work, or to release ownership on the issue if needed.
PR management

Purpose

Speed up PR management.

The `etcd` PRs are listed at https://github.com/etcd-io/etcd/pulls

A PR can have various labels, milestones, reviewers, etc. The detailed list of labels can be found at https://github.com/kubernetes/kubernetes/labels

Following are a few example searches on PR for convenience:
* [Open PRS for milestone etcd-v3.6](https://github.com/etcd-io/etcd/pulls?utf8=%E2%9C%93&q=is%3Apr+is%3Aopen+milestone%3Aetcd-v3.6)
* [PRs under investigation](https://github.com/etcd-io/etcd/labels/Investigating)

Scope

These guidelines serve as a primary document for managing PRs in `etcd`. Everyone is welcome to help manage PRs but the work and responsibilities discussed in this document are created with `etcd` maintainers and active contributors in mind.

Ensure tests are run

The etcd project use Kubernetes Prow and GitHub Actions to run tests. To ensure all required tests run if a pull request is ready for testing and still has the `needs-ok-to-test`
label then please comment on the pull request `/ok-to-test`.

Handle inactive PRs
Poke PR owner if review comments are not addressed in 15 days. If the PR owner does not reply in 90 days, update the PR with a new commit if possible. If not, inactive PR should be closed after 180 days.

Poke reviewer if needed

Reviewers are responsive in a timely fashion, but considering everyone is busy, give them some time after requesting a review if a quick response is not provided. If the response is not provided in 10 days, feel free to contact them via adding a comment in the PR or sending an email or message on Slack.

Verify important labels are in place

Make sure that appropriate reviewers are added to the PR. Also, make sure that a milestone is identified. If any of these or other important labels are missing, add them. If a correct label cannot be decided, leave a comment for the maintainers to do so as needed.
Roadmap

etcd uses GitHub milestones to track all tasks in each major or minor release. The `roadmap.md` file only records the
most important tasks for each release. The list is based on the current maintainer capacity that may shift over time. Proposed milestones are what we think we can deliver with the people we have. If we have more support on the important
stuff, we could pick up more items from the backlog. Note that etcd will continue to mainly focus on technical debt over
the next few major or minor releases.

Each item has an assigned priority. Refer to [priority definitions](https://github.com/etcd-io/etcd/blob/main/Documentation/contributor-guide/triage_issues.md#step-5---prioritise-the-issue).

v3.6.0

For a full list of tasks in `v3.6.0`, please see [milestone etcd-v3.6](https://github.com/etcd-io/etcd/milestone/38).

Title	Priority	Status	Note
[Support downgrade](https://github.com/etcd-io/etcd/issues/11716)	priority/important-soon	In progress	etcd will support downgrade starting from 3.6.0. But it will also support offline downgrade from 3.5 to 3.4.
[StoreV2 deprecation](https://github.com/etcd-io/etcd/issues/12913)	priority/important-soon	In progress	This task will be covered in both 3.6 and 3.7.
[Release raft 3.6.0](https://github.com/etcd-io/raft/issues/89)	priority/important-soon	Not started	etcd 3.6.0 will depends on raft 3.6.0
[Release bbolt 1.4.0](https://github.com/etcd-io/bbolt/issues/553)	priority/important-soon	Not started	etcd 3.6.0 will depends on bbolt 1.4.0
[Support /livez and /readyz endpoints](https://github.com/etcd-io/etcd/issues/16007)	priority/important-longterm	In progress	It provides clearer APIs, and can also work around the stalled writes issue
[Bump gRPC](https://github.com/etcd-io/etcd/issues/16290)	priority/important-longterm	Completed	It isn't guaranteed to be resolved in 3.6, and might be postponed to 3.7 depending on the effort and risk.
[Deprecate grpc-gateway or bump it](https://github.com/etcd-io/etcd/issues/14499)	priority/important-longterm	Completed	It isn't guaranteed to be resolved in 3.6, and might be postponed to 3.7 depending on the effort and risk.
[bbolt: Add logger into bbolt](https://github.com/etcd-io/bbolt/issues/509)	priority/important-longterm	Completed	It's important to diagnose bbolt issues
[bbolt: Add surgery commands](https://github.com/etcd-io/bbolt/issues/370)	priority/important-longterm	Completed	Surgery commands are important for fixing corrupted db files
[Evaluate and (Gradulate or deprecate/remove) experimental features](https://github.com/etcd-io/etcd/issues/16292)	priority/backlog	Not started	This task will be covered in both 3.6 and 3.7.

v3.7.0

For a full list of tasks in `v3.7.0`, please see [milestone etcd-v3.7](https://github.com/etcd-io/etcd/milestone/39).

Title	Priority	Note

[StoreV2 deprecation](https://github.com/etcd-io/etcd/issues/12913)	P0	Finish the remaining tasks 3.7.
[Refactor lease: Lease might be revoked by mistake by old leader](https://github.com/etcd-io/etcd/issues/15247)	P1	to be investigated & discussed
[Integrate raft's new feature (async write) into etcd](https://github.com/etcd-io/etcd/issues/16291)	P1	It should improve the performance
[bbolt: Support customizing the bbolt rebalance threshold](https://github.com/etcd-io/bbolt/issues/422)	P2	It may get rid of etcd's defragmentation. Both bbolt and etcd need to be changed.
[Evaluate and (graduate or deprecate/remove) experimental features](https://github.com/etcd-io/etcd/issues/16292)	P2	Finish the remaining tasks 3.7.

Backlog (future releases)

Title	Priority	Note
[Remove the dependency on grpc-go's experimental API](https://github.com/etcd-io/etcd/issues/15145)		
[Protobuf: cleanup both golang/protobuf and gogo/protobuf](https://github.com/etcd-io/etcd/issues/14533)		
[Proposals should include a merkle root](https://github.com/etcd-io/etcd/issues/13839)		
[Add Distributed Tracing using OpenTelemetry](https://github.com/etcd-io/etcd/issues/12460)		
[Support CA rotation](https://github.com/etcd-io/etcd/issues/11555)		
[bbolt: Migrate all commands to cobra style commands](https://github.com/etcd-io/bbolt/issues/472)		
[raft: enhance the configuration change validation](https://github.com/etcd-io/raft/issues/80)		

Release

The guide talks about how to release a new version of etcd.

The procedure includes some manual steps for sanity checking, but it can probably be further scripted. Please keep this document up-to-date if making changes to the release process.

Release management

The following pool of release candidates manages the release of each etcd major/minor version as well as manages patches
to each stable release branch. They are responsible for communicating the timelines and status of each release and for ensuring the stability of the release branch.

- Benjamin Wang [@ahrtr](https://github.com/ahrtr)
- James Blair [@jmhbnz](https://github.com/jmhbnz)
- Marek Siarkowicz [@serathius](https://github.com/serathius)
- Sahdev Zala [@spzala](https://github.com/spzala)
- Wenjia Zhang [@wenjiaswe](https://github.com/wenjiaswe)

All release version numbers follow the format of [semantic versioning 2.0.0](http://semver.org/).

Major, minor version release, or its pre-release

- Ensure
 the relevant [milestone](https://github.com/etcd-io/etcd/milestones) on GitHub is complete. All referenced issues should be closed or moved elsewhere.
- Ensure the latest [upgrade documentation](https://etcd.io/docs/next/upgrades) is available.
- Bump [hardcoded MinClusterVerion in the repository](https://github.com/etcd-io/etcd/blob/v3.4.15/version/version.go#L29), if necessary.
- Add feature capability maps for the new version, if necessary.

Patch version release

- To request a backport, developers submit cherry-pick PRs targeting the release branch. The commits should not include merge commits. The commits should be restricted to bug fixes and security patches.
- The cherrypick PRs should target the appropriate release branch (`base:release-<major>-<minor>`). The k8s infra cherry pick robot `/cherrypick <branch>` PR chatops command may be used to automatically generate cherrypick PRs.
- The release patch manager reviews the cherrypick PRs. Please discuss carefully what is backported
 to the patch release. Each patch release should be strictly better than its predecessor.
- The release patch manager will cherry-pick these commits starting from the oldest one into stable branch.

Write a release note

- Write an introduction for the new release. For example, what major bug we fix, what new features we introduce, or what performance improvement we make.
- Put `[GH XXXX]` at the head of the change line to reference the Pull Request that introduces the change. Moreover, add a link on it to jump to the Pull Request.
- Find PRs with the `release-note` label and explain them in the `NEWS` file, as a straightforward summary of changes for end-users.

Patch release criteria

The etcd project aims to release a new patch version if any of the following conditions are met:

- Fixed one or more major CVEs (>=7.5).
- Fixed one or more critical bugs.
- Fixed three or more major bugs.
- Fixed five or more minor bugs.

Release guide

Prerequisites

There are some
 prerequisites, which should be done before the release process. These are one-time operations,
which don't need to be executed before releasing each version.
1. Generate a GPG key and add it to your GitHub account. Refer to the links on
[settings](https://github.com/settings/keys).

2. Ensure you have a Linux machine, on which the git, Golang, and docker have been installed.
   - Ensure the Golang version matches the version defined in `.go-version` file.
   - Ensure non-privileged users can run docker commands, refer to the [Linux postinstall](https://docs.docker.com/engine/install/linux-postinstall/).
   - Ensure there is at least 5GB of free space on your Linux machine.
3. Install gsutil, refer to [gsutil_install](https://cloud.google.com/storage/docs/gsutil_install). When asked about cloud project to use, pick `etcd-development`.
4. Authenticate the image registry, refer to [Authentication methods](https://cloud.google.com/container-registry/docs/advanced-authentication).
  - `gcloud auth login`
  - `gcloud auth configure-docker`
5. Install gh, refer to [GitHub's documentation](https://github.com/cli/cli#installation). Ensure that running `gh auth login` succeeds for the GitHub account you use to contribute to etcd, and that `gh auth status` has a clean exit and doesn't show any issues.

Release steps

1. Raise an issue to publish the release plan, e.g. [issues/17350](https://github.com/etcd-io/etcd/issues/17350).
2. Raise a `kubernetes/org` pull request to temporarily elevate permissions for the GitHub release team.
3. Once permissions are elevated, temporarily relax [branch protections](https://github.com/etcd-io/etcd/settings/branches) to allow pushing changes directly to `release-*` branches in GitHub.
4. Verify you can pass the authentication to the image registries,
  - `docker login gcr.io`
  - `docker login quay.io`
    - If the release person doesn't have access to 1password, one of the owners (@ahrtr, @ivanvc, @jmhbnz, @serathius) needs to share the password with them per [this guide](https://support.1password.com/share-items/). See rough steps below,
      - [Sign in](https://team-etcd.1password.com/home) to your account on 1password.com.
      - Click `Your Vault Items` on the right side.
      - Select `Password of quay.io`.
      - Click `Share` on the top right, and set expiration as `1 hour` and only available to the release person using his/her email.
      - Click `Copy Link` then send the link to the release person via slack or email.
5. Clone the etcd repository and checkout the target branch,
  - `git clone --branch release-3.X git@github.com:etcd-io/etcd.git`
6. Run the release script under the repository's root directory, replacing `${VERSION}` with a value without the `v` prefix, i.e. `3.5.13`.
  - `DRY_RUN=false ./scripts/release.sh ${VERSION}`
  - **NOTE:** When doing a pre-release (i.e., a version from the main branch, 3.6.0-alpha.2), you will need to explicitly set the branch to main:

  ```
    DRY_RUN=false BRANCH=main ./scripts/release.sh ${VERSION}
  ```

  It generates all release binaries under the directory `/tmp/etcd-release-${VERSION}/etcd/release/` and images.

Binaries are pushed to the Google Cloud bucket
under project `etcd-development`, and images are pushed to `quay.io` and `gcr.io`.
7. Publish the release page on GitHub
- Open the **draft** release URL shown by the release script
- Click the pen button at the top right to edit the release
- Review that it looks correct, reviewing that the bottom checkboxes are checked depending on the release version (v3.4 no checkboxes, v3.5 has the set as latest release checkbox checked, v3.6 has the set as pre-release checkbox checked)
- Then, publish the release
8. Announce to the etcd-dev googlegroup

Follow the format of previous release emails sent to etcd-dev@googlegroups.com, see an example below. After sending out the email, ask one of the mailing list maintainers to approve the
email from the pending list. Additionally, label the release email as `Release`.

```text
Hello,

etcd v3.4.30 is now public!

https://github.com/etcd-io/etcd/releases/tag/v3.4.30

Thanks to everyone who contributed to the release!

etcd team
```

9. Update the changelog to reflect the correct release date.
10. Paste the release link to the issue raised in Step 1 and close the issue.
11. Restore standard branch protection settings and raise a follow-up `kubernetes/org` pull request to return to least privilege permissions.
12. Crease a new stable branch through `git push origin release-${VERSION_MAJOR}.${VERSION_MINOR}` if this is a new major or minor stable release.
13. Re-generate a new password for quay.io if needed (e.g. shared to a contributor who isn't in the release team, and we should rotate the password at least once every 3 months).

Release known issues

1. Timeouts pushing binaries - If binaries fail to fully upload to Google Cloud storage, the script must be re-run using the same command. Any artifacts that are already pushed will be overwritten to ensure they are correct. The storage bucket does not use object versioning so incorrect files cannot remain.

2. Timeouts pushing images - It is rare, although possible for connection timeouts to occur when publishing etcd release images to `quay.io` or `gcr.io`. If this occurs, it is known to be safe to rerun the release script command appending the `--no-upload` flag, and image uploads will gracefully resume.

3. GPG vs SSH signing - The release scripts assume that git tags will be signed with a GPG key. Since 2022 GitHub has supported [signing commits and tags using ssh](https://github.blog/changelog/2022-08-23-ssh-commit-

verification-now-supported). Until further release script updates are completed you will need to disable this feature in your `~/.gitconfig` and revert to signing via GPG to perform etcd releases.
Golang modules

The etcd project (since version 3.5) is organized into multiple
[golang modules](https://golang.org/ref/mod) hosted in a [single repository](https://golang.org/ref/mod#vcs-dir).

![modules graph](modules.svg)

There are the following modules:

- **go.etcd.io/etcd/api/v3** - contains API definitions
(like protos & proto-generated libraries) that defines communication protocol
between etcd clients and servers.

- **go.etcd.io/etcd/pkg/v3** - a collection of utility packages used by etcd
without being specific to etcd itself. A package belongs here
only if it could possibly be moved out into its own repository in the future.
Please avoid adding here code that has a lot of dependencies on its own, as
they automatically become dependencies of the client library
(that we want to keep lightweight).

- **go.etcd.io/etcd/client/v3** - client library used to contact etcd over
the network (grpc). Recommended for all new usage of etcd.

- **go.etcd.io/raft/v3**
- implementation of distributed consensus
protocol. Should have no etcd specific code. Hosted in a separate repository:
https://github.com/etcd-io/raft.

- **go.etcd.io/etcd/server/v3** - etcd implementation.
The code in this package is internal to etcd and should not be consumed
by external projects. The package layout and API can change within the minor versions.

- **go.etcd.io/etcd/etcdctl/v3** - a command line tool to access and manage etcd.

- **go.etcd.io/etcd/tests/v3** - a module that contains all integration tests of etcd.
  Notice: All unit tests (fast and not requiring cross-module dependencies)
  should be kept in the local modules of the code under the test.

- **go.etcd.io/bbolt** - implementation of persistent b-tree.
  Hosted in a separate repository: https://github.com/etcd-io/bbolt.

Operations

1. All etcd modules should be released in the same versions, e.g.
  `go.etcd.io/etcd/client/v3@v3.5.10` must depend on `go.etcd.io/etcd/api/v3@v3.5.10`.

The consistent updating of versions can be performed using:
```shell script
% DRY_RUN=false TARGET_VERSION="v3.5.10" ./scripts/release_mod.sh update_versions
```
2. The released modules should be tagged according to https://golang.org/ref/mod#vcs-version rules,
i.e. each module should get its own tag.
The tagging can be performed using:
```shell script
% DRY_RUN=false REMOTE_REPO="origin" ./scripts/release_mod.sh push_mod_tags
```

3. All etcd modules should depend on the same versions of underlying dependencies.
This can be verified using:
```shell script
% PASSES="dep" ./test.sh
```

4. The go.mod files must not contain dependencies not being used and must
conform to `go mod tidy` format.
This is being verified by:
```
% PASSES="mod_tidy" ./test.sh
```

5. To trigger actions across all modules (e.g. auto-format all files), please
use/expand the following script:
```shell script
% ./scripts/fix.sh
```

###
Future

As a North Star, we would like to evaluate etcd modules towards the following model:

![modules graph](modules-future.svg)

This assumes:
- Splitting etcdmigrate/etcdadm out of etcdctl binary.
  Thanks to this etcdctl would become clearly a command-line wrapper
  around network client API,
  while etcdmigrate/etcdadm would support direct physical operations on the
  etcd storage files.
- Splitting etcd-proxy out of ./etcd binary, as it contains more experimental code
  so carries additional risk & dependencies.
- Deprecation of support for v2 protocol.

Reporting bugs

If any part of the etcd project has bugs or documentation mistakes, please let us know by [opening an issue][etcd-issue]. We treat bugs and mistakes very seriously and believe no issue is too small. Before creating a bug report, please check that an issue reporting the same problem does not already exist.

To make the bug report accurate and easy to understand, please try to create bug reports that are:

- Specific. Include as many details as possible: which version, what environment, what configuration, etc. If the bug is related to running the etcd server, please attach the etcd log (the starting log with the etcd configuration is especially important).

- Reproducible. Include the steps to reproduce the problem. We understand some issues might be hard to reproduce, please include the steps that might lead to the problem. If possible, please attach the affected etcd data dir and stack trace to the bug report.

- Isolated. Please try to isolate and reproduce the bug with
 minimum dependencies. It would significantly slow down the speed to fix a bug if too many dependencies are involved in a bug report. Debugging external systems that rely on etcd is out of scope, but we are happy to provide guidance in the right direction or help with using etcd itself.

- Unique. Do not duplicate existing bug reports.

- Scoped. One bug per report. Do not follow up with another bug inside one report.

It may be worthwhile to read [Elika Etemads article on filing good bug reports][filing-good-bugs] before creating a bug report.

We might ask for further information to locate a bug. A duplicated bug report will be closed.

Frequently asked questions

How to get a stack trace

``` bash
$ kill -QUIT $PID
```

How to get the etcd version

``` bash
$ etcd --version
```

How to get etcd configuration and log when it runs as systemd service etcd2.service

``` bash
$ sudo systemctl cat etcd2
```

$ sudo journalctl -u etcd2
```

Due to an upstream systemd bug, journald
may miss the last few log lines when its processes exit. If journalctl says etcd stopped without a fatal or panic message, try `sudo journalctl -f -t etcd2` to get the full log.

[etcd-issue]: https://github.com/etcd-io/etcd/issues/new
[filing-good-bugs]: http://fantasai.inkedblade.net/style/talks/filing-good-bugs/
# Community membership

This doc outlines the various responsibilities of contributor roles in etcd.

| Role | Responsibilities | Requirements | Defined by |
|---|---|---|---|
| Member | Active contributor in the community | Sponsored by 2 reviewers and multiple contributions | etcd GitHub org member |
| Reviewer | Review contributions from other members | History of review and authorship | [OWNERS] file reviewer entry |
| Maintainer | Set direction and priorities for the project | Demonstrated responsibility and excellent technical judgement | [OWNERS] file approver entry |

## New contributors

New contributors should be welcomed to the community by existing members,
helped with
PR workflow, and directed to relevant documentation and
communication channels.

## Established community members

Established community members are expected to demonstrate their adherence to the
principles in this document, familiarity with project organization, roles,
policies, procedures, conventions, etc., and technical and/or writing ability.
Role-specific expectations, responsibilities, and requirements are enumerated
below.

## Member

Members are continuously active contributors to the community.  They can have
issues and PRs assigned to them. Members are expected to remain active
contributors to the community.

**Defined by:** Member of the etcd GitHub organization.

### Requirements
```

- Enabled [two-factor authentication] on their GitHub account
- Have made multiple contributions to the project or community. Contribution may include, but is not limited to:
  - Authoring or reviewing PRs on GitHub. At least one PR must be **merged**.
  - Filing or commenting on issues on
GitHub
  - Contributing to community discussions (e.g. meetings, Slack, email discussion
    forums, Stack Overflow)
- Subscribed to [etcd-dev@googlegroups.com](https://groups.google.com/g/etcd-dev)
- Have read the [contributor guide]
- Sponsored by two active maintainers or reviewers.
  - Sponsors must be from multiple member companies to demonstrate integration across the community.
  - With no objections from other maintainers
- Open a [membership nomination] issue against the `kubernetes/org` repo
  - Ensure your sponsors are @mentioned on the issue
  - Make sure that the list of contributions included is representative of your work on the project.
- Members can be removed by a supermajority of the maintainers or can resign by notifying
the maintainers.

Responsibilities and privileges

- Responsive to issues and PRs assigned to them
- Granted "triage access" to etcd project
- Active owner of code they have contributed (unless ownership is explicitly transferred)
  - Code is well-tested
  - Tests consistently pass
  - Addresses bugs or issues discovered after code is accepted

Note: Members who frequently contribute code are expected to proactively
perform code reviews and work towards becoming a *reviewer*.

Reviewers

Reviewers are contributors who have demonstrated greater skill in
reviewing the code from other contributors. They are knowledgeable about both
the codebase and software engineering principles. Their LGTM counts towards
merging a code change into the project. A reviewer is generally on the ladder towards
maintainership.

Defined by: *reviewers* entry in the [OWNERS] file.

Requirements

- member for at least 3 months.
- Primary reviewer for at least 5 PRs to the codebase.
- Reviewed or contributed at least 20 substantial PRs to the codebase.
- Knowledgeable about the codebase.
- Sponsored by two active maintainers.

  - Sponsors must be from multiple member companies to demonstrate integration across the community.
  - With no objections from other maintainers
- Reviewers can be removed by a supermajority of the maintainers or can resign by notifying the maintainers.

Responsibilities and privileges

- Code reviewer status may be a precondition to accepting large code contributions
- Responsible for project quality control via code reviews
  - Focus on code quality and correctness, including testing and factoring
  - May also review for more holistic issues, but not a requirement
- Expected to be responsive to review requests
- Assigned PRs to review related to area of expertise
- Assigned test bugs related to area of expertise
- Granted "triage access" to etcd project

Maintainers

Maintainers are first and foremost contributors who have shown they
are committed to the long-term success of a project. Maintainership is about building
trust with the current maintainers and being a person that they can
depend on to make decisions in the best interest of the project in a consistent manner.

Defined by: *approvers* entry in the [OWNERS] file.

Requirements

- Deep understanding of the technical goals and direction of the project
- Deep understanding of the technical domain of the project
- Sustained contributions to design and direction by doing all of:
  - Authoring and reviewing proposals
  - Initiating, contributing, and resolving discussions (emails, GitHub issues, meetings)
  - Identifying subtle or complex issues in the designs and implementation of PRs
- Directly contributed to the project through implementation and/or review
- Sponsored by two active maintainers and elected by supermajority
  - Sponsors must be from multiple member companies to demonstrate integration across the community.
- To become a maintainer send an email with your candidacy to etcd-maintainers-private@googlegroups.com
  - Ensure your sponsors are @mentioned in the email
  - Include a list of contributions representative of your work on the project.
  -
 Existing maintainers vote will privately and respond to the email with either acceptance or feedback for suggested improvement.
- With your membership approved you are expected to:
 - Open a PR and add an entry to the [OWNERS] file
 - Subscribe to etcd-maintainers@googlegroups.com and etcd-maintainers-private@googlegroups.com
 - Request to join [etcd-maintainer teams of etcd organization of GitHub](https://github.com/orgs/etcd-

io/teams/maintainers-etcd)
 - Request to join the private slack channel for etcd maintainers on [kubernetes slack](http://slack.kubernetes.io/)
 - Request access to etcd-development GCP project where we publish releases
 - Request access to passwords shared between maintainers

Responsibilities and privileges

- Make and approve technical design decisions
- Set technical direction and priorities
- Define milestones and releases
- Mentor and guide reviewers, and contributors to the project.
- Participate when called upon in the [security disclosure and
 release process]
- Ensure the continued health of the project
   - Adequate test coverage to confidently release
   - Tests are passing reliably (i.e. not flaky) and are fixed when they fail
- Ensure a healthy process for discussion and decision-making is in place.
- Work with other maintainers to maintain the project's overall health and success holistically

Retiring

Life priorities, interests, and passions can change. Maintainers can retire and
move to [emeritus maintainers]. If a maintainer needs to step down, they should
inform other maintainers and, if possible, help find someone to pick up the related
work. At the very least, ensure the related work can be continued. Afterward,
they can remove themselves from the list of existing maintainers.

If a maintainer has not been performing their duties for 12 months,
they can be removed by other maintainers. In that case, the inactive maintainer will
be first notified via an email. If the situation doesn't improve, they will be
removed.
 If an emeritus maintainer wants to regain an active role, they can do
so by renewing their contributions. Active maintainers should welcome such a move.
Retiring other maintainers or regaining the status should require the approval
of at least two active maintainers.

Acknowledgements

Contributor roles and responsibilities were written based on [Kubernetes community membership]

[OWNERS]: /OWNERS
[contributor guide]: /CONTRIBUTING.md
[membership nomination]: https://github.com/kubernetes/org/issues/new?assignees=&labels=area%2Fgithub-membership&projects=&template=membership.yml&title=REQUEST%3A+New+membership+for+%3Cyour-GH-handle%3E
[Kubernetes community membership]: https://github.com/kubernetes/community/blob/master/community-membership.md
[emeritus maintainers]: /README.md#etcd-emeritus-maintainers

[security disclosure and release process]: /security/README.md
[two-factor authentication]: https://docs.github.com/en/authentication/securing-your-account-with-two-factor-authentication-2fa/about-two-factor-authentication

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limitations under the License.
Logging Conventions

etcd uses the [zap][zap] library for logging application output categorized into *levels*. A log message's level is determined according to these conventions:

* Debug: Everything is still fine, but even common operations may be logged, and less helpful but more quantity of notices. Usually not used in production.
 * Examples:
  * Send a normal message to a remote peer
  * Write a log entry to disk

* Info: Normal, working log information, everything is fine, but helpful notices for auditing or common operations. Should rather not be logged more frequently than once per a few seconds in a normal server's operation.
 * Examples:
  * Startup configuration
  * Start to do a snapshot

* Warning: (Hopefully) Temporary conditions that may cause errors, but may work fine. A replica disappearing (that may reconnect) is a warning.
 * Examples:
  * Failure to send a raft message to a remote peer
  * Failure to receive heartbeat message within the configured election
 timeout

* Error: Data has been lost, a request has failed for a bad reason, or a required resource has been lost.
 * Examples:

  * Failure to allocate disk space for WAL

* Panic: Unrecoverable or unexpected error situation that requires stopping execution.
 * Examples:
  * Failure to create the database

* Fatal: Unrecoverable or unexpected error situation that requires immediate exit. Mostly used in the test.
 * Examples:
  * Failure to find the data directory
  * Failure to run a test function

[zap]: https://github.com/uber-go/zap
Dependency management

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 - [Indirect dependencies](#indirect-dependencies)
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  - [arduino/setup-protoc](#arduinosetup-protoc)
 - [Rotation worksheet](#rotation-worksheet)
- **[Stable branches](#stable-branches)**
- **[Golang versions](#golang-versions)**
- **[Core dependencies mappings](#core-dependencies-mappings)**

Main branch

The dependabot is enabled & [configured](https://github.com/etcd-io/etcd/blob/main/.github/dependabot.yml) to manage dependencies for etcd `main` branch. But dependabot doesn't work well for multi-module repository like `etcd`,
see [dependabot-core/issues/6678](https://github.com/dependabot/dependabot-core/issues/6678).
Usually, human intervention is required
 each time when dependabot automatically opens some PRs to bump dependencies.
Please see the guidance below.

Dependencies used in workflows

The PRs that automatically bump dependencies (see examples below) used in workflows are fine and can be approved & merged directly as long as all checks are successful.

- [build(deps): bump github/codeql-action from 2.2.11 to 2.2.12](https://github.com/etcd-io/etcd/pull/15736)
- [build(deps): bump actions/checkout from 3.5.0 to 3.5.2](https://github.com/etcd-io/etcd/pull/15735)
- [build(deps): bump ossf/scorecard-action from 2.1.2 to 2.1.3](https://github.com/etcd-io/etcd/pull/15607)

Bumping order

When multiple etcd modules depend on the same package, please bump the package version for all the modules in the correct order. The rule is simple:
if module A depends on module B, then bump the dependency for module B before module A. If the two modules do not depend on each other, then
it doesn't matter to bump which module first. For
example, multiple modules depend on `github.com/spf13/cobra`, so we need to bump the dependency
in the following order,

- go.etcd.io/etcd/pkg/v3
- go.etcd.io/etcd/server/v3
- go.etcd.io/etcd/etcdctl/v3
- go.etcd.io/etcd/etcdutl/v3
- go.etcd.io/etcd/tests/v3
- go.etcd.io/etcd/v3
- go.etcd.io/etcd/tools/v3

For more details about etcd Golang modules, please check <https://etcd.io/docs/next/dev-internal/modules>

Note the module `go.etcd.io/etcd/tools/v3` doesn't depend on any other modules, nor by any other modules, so it doesn't matter when to bump dependencies for it.

Steps to bump a dependency

Use the `github.com/spf13/cobra` as an example, follow the steps below to bump it from 1.6.1 to 1.7.0 for module `go.etcd.io/etcd/etcdctl/v3`,

```bash
cd ${ETCD_ROOT_DIR}/etcdctl
go get github.com/spf13/cobra@v1.7.0
go mod tidy
cd ..
./scripts/fix.sh
```

Execute the same steps for all other modules. When you finish bumping the dependency for all modules, then commit the change,

```bash
git
 add .
git commit --signoff -m "dependency: bump github.com/spf13/cobra from 1.6.1 to 1.7.0"
```

Please close the related PRs which were automatically opened by dependabot.

When you bump multiple dependencies in one PR, it's recommended to create a separate commit for each dependency. But it isn't a must; for example,
you can get all dependencies bumping for the module `go.etcd.io/etcd/tools/v3` included in one commit.

Troubleshooting

In an event of bumping the version of protoc, protoc plugins or grpc-gateway, it might change `*.proto` file which can result in the following error:

```bash
[0;31mFAIL: 'genproto' FAILED at Wed Jul 31 07:09:08 UTC 2024
make: *** [Makefile:134: verify-genproto] Error 255
```

To fix the above error, run the following script from the root of etcd repository:

```bash
./scripts/genproto.sh
```

Indirect dependencies

Usually, we don't bump a dependency if all modules just indirectly depend on it, such as `github.com/go-logr/logr`.

If
 an indirect dependency (e.g. `D1`) causes any CVE or bugs that affect etcd, usually the module (e.g. `M1`, not part of etcd, but used by etcd)
which depends on it should bump the dependency (`D1`), and then etcd just needs to bump `M1`. However, if the module (`M1`) somehow doesn't
bump the problematic dependency, then etcd can still bump it (`D1`) directly following the same steps above. But as a long-term solution, etcd should
try to remove the dependency on such module (`M1`) that lack maintenance.

For mixed cases, in which some modules directly while others indirectly depend on a dependency, we have multiple options,

- Bump the dependency for all modules, no matter it's direct or indirect dependency.
- Bump the dependency only for modules that directly depend on it.

We should try to follow the first way, and temporarily fall back to the second one if we run into any issue on the first way. Eventually we
should fix the issue and ensure all modules depend on the same version of the
 dependency.

Known incompatible dependency updates

arduino/setup-protoc

Please refer to [build(deps): bump arduino/setup-protoc from 1.3.0 to 2.0.0](https://github.com/etcd-io/etcd/pull/16016)

Rotation worksheet

The dependabot scheduling interval is weekly; it means dependabot will automatically raise a bunch of PRs per week.
Usually, human intervention is required each time. We have a [rotation worksheet](https://docs.google.com/spreadsheets/d/1jodHIO7Dk2VWTs1IRnfMFaRktS9IH8XRyifOnPdSY8I/edit#gid=1394774387),
and everyone is welcome to participate; you just need to register your name in the worksheet.

Stable branches

Usually, we don't proactively bump dependencies for stable releases unless there are any CVEs or bugs that affect etcd.

If we have to do it, then follow the same guidance above. Note that there is no `./scripts/fix.sh` in release-3.4, so no need to
execute it for 3.4.

Golang versions

The etcd project aims to maintain a development branch that
is on the latest [Go version](https://go.dev/dl), ideally, this will align with the Go version in use for Kubernetes project development. For an example of how to update etcd to a new minor release of Go refer to issue <https://github.com/etcd-io/etcd/issues/16393> and the linked pull requests.

Suggested steps for performing a minor version upgrade for the etcd development branch:

1. Carefully review new Go version release notes and potentially related blog posts for any deprecations, performance impacts, or other considerations.
2. Create a GitHub issue to signal intent to upgrade and invite discussion, for example, <https://github.com/etcd-io/etcd/issues/16393>.
3. Complete the upgrade locally in your development environment by editing `.go-version` and running `make fix`.
4. Run performance benchmarks locally to compare before and after.
5. Raise a pull request for the changes, for example, <https://github.com/etcd-io/etcd/pull/16394>.

Stable etcd release branches will be maintained
to stay on the latest patch release of a supported Go version. Upgrading minor versions will be completed before the minor version in use currently is no longer supported. Refer to the [Go release policy](https://go.dev/doc/devel/release).

For an example of how to update etcd to a new patch release of Go refer to issue <https://github.com/etcd-io/etcd/issues/16343> and the linked pull requests.

References:

- <https://github.com/kubernetes/sig-release/blob/master/release-engineering/handbooks/go.md>

Core dependencies mappings

[bbolt](https://github.com/etcd-io/bbolt) and [raft](https://github.com/etcd-io/raft) are two core dependencies of etcd.

Both etcd 3.4.x and 3.5.x depend on bbolt 1.3.x, and etcd 3.6.x (`main` branch) depends on bbolt 1.4.x.

raft is included in the etcd repository for release-3.4 and release-3.5 branches, so etcd 3.4.x and 3.5.x do not depend on any
external raft module. We moved raft into [a separate repository](https://github.com/etcd-io/raft) starting from 3.6 (`main` branch), and the first raft
release will be v3.6.0, so etcd 3.6.x will depend on raft 3.6.x.

Please see the table below:

etcd versions	bbolt versions	raft versions
3.4.x	v1.3.x	N/A
3.5.x	v1.3.x	N/A
3.6.x	v1.4.x	v3.6.x

1.155 gomemcache 0.0.0-20250403215159-8d39553ac7cf

1.155.1 Available under license :

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1.156 go.etcd.io/etcd/client/pkg/v3 3.6.0

1.156.1 Available under license :

Features

This document provides an overview of etcd features and general development guidelines for adding and deprecating them. The project maintainers can override these guidelines per the need of the project following the project governance.

Overview

The etcd features fall into three stages, experimental, stable, and unsafe.

Experimental

Any new feature is usually added as an experimental feature. An experimental feature is characterized as below:
- Might be buggy due to a lack of user testing. Enabling the feature may not work as expected.
- Disabled by default when added initially.
- Support for such a feature may be dropped at any time without notice
  - Feature-related issues may be given lower priorities.
  - It can be removed in the next minor or major release without following the feature deprecation policy unless it graduates to a stable future.

Stable

A stable feature is characterized as below:
- Supported as part of the supported releases of etcd.
-
 May be enabled by default.
- Discontinuation of support must follow the feature deprecation policy.

Unsafe

Unsafe features are rare and listed under the `Unsafe feature:` section in the etcd usage documentation. By default, they are disabled. They should be used with caution following documentation. An unsafe feature can be removed in the next minor or major release without following the feature deprecation policy.

Development Guidelines

Adding a new feature

Any new enhancements to the etcd are typically added as an experimental feature. The general development requirements are listed below. They can be somewhat flexible depending on the scope of the feature and review discussions and will evolve over time.
- Open an issue
  - It must provide a clear need for the proposed feature.
  - It should list development work items as checkboxes. There must be one work item towards future graduation to

a stable future.
  - Label the issue with `type/feature` and `experimental`.
  - Keep the issue open for tracking purposes until a decision is made on graduation.
- Open a Pull Request (PR)
  - Provide unit tests. Integration tests are also recommended as possible.
  - Provide robust e2e test coverage. If the feature being added is complicated or quickly needed, maintainers can decide to go with e2e tests for basic coverage initially and have robust coverage added at a later time before the feature graduation to the stable feature.
  - Provide logs for proper debugging.
  - Provide metrics and benchmarks as needed.
  - The Feature should be disabled by default.
  - Any configuration flags related to the implementation of the feature must be prefixed with `experimental` e.g. `--experimental-feature-name`.
  - Add a CHANGELOG entry.
- At least two maintainers must approve feature requirements and related code changes.

Graduating an Experimental feature to Stable

It is important that experimental features don't get stuck in that stage.
They should be revisited and moved to the stable stage following the graduation steps as described here.

Locate graduation candidate
Decide if an experimental feature is ready for graduation to the stable stage.
- Find the issue that was used to enable the experimental feature initially. One way to find such issues is to search for issues with `type/feature` and `experimental` labels.
- Fix any known open issues against the feature.
- Make sure the feature was enabled for at least one previous release. Check the PR(s) reference from the issue to see when the feature-related code changes were merged.

Provide implementation
If an experimental feature is found ready for graduation to the stable stage, open a Pull Request (PR) with the following changes.
- Add robust e2e tests if not already provided.
- Add a new stable feature flag identical to the experimental feature flag but without the `--experimental` prefix.
- Deprecate the experimental feature following the [feature deprecation
policy](#Deprecating-a-feature).
- Implementation must ensure that both the graduated and deprecated experimental feature flags work as expected. Note that both these flags will co-exist for the timeframe described in the feature deprecation policy.
- Enable the graduated feature by default if needed.

At least two maintainers must approve the work. Patch releases should not be considered for graduation.

Deprecating a feature

Experimental
An experimental feature deprecates when it graduates to the stable stage.
- Add a deprecation message in the documentation of the experimental feature with a recommendation to use a related stable feature. e.g. `DEPRECATED. Use <feature-name> instead.`

- Add a `deprecated` label in the issue that was initially used to enable the experimental feature.

Stable
As the project evolves, a stable feature may sometimes need to be deprecated and removed. Such a situation should be handled using the steps below:
- Create an issue for tracking
 purposes.
- Add a deprecation message in the feature usage documentation before a planned release for feature deprecation. e.g. `To be deprecated in <release>.`. If a new feature replaces the `To be deprecated` feature, then also provide a message saying so. e.g. `Use <feature-name> instead.`.
- Deprecate the feature in the planned release with a message as part of the feature usage documentation. e.g. `DEPRECATED`. If a new feature replaces the deprecated feature, then also provide a message saying so. e.g. `DEPRECATED. Use <feature-name> instead.`.
- Add a `deprecated` label in the related issue.

Remove the deprecated feature in the following release. Close any related issue(s). At least two maintainers must approve the work. Patch releases should not be considered for deprecation.
Set up the local cluster

For testing and development deployments, the quickest and easiest way is to configure a local cluster. For a production deployment, refer to the [clustering][clustering] section.

Local standalone cluster

Starting a cluster

Run the following to deploy an etcd cluster as a standalone cluster:

```
$ ./etcd
...
```

If the `etcd` binary is not present in the current working directory, it might be located either at `$GOPATH/bin/etcd` or at `/usr/local/bin/etcd`. Run the command appropriately.

The running etcd member listens on `localhost:2379` for client requests.

Interacting with the cluster

Use `etcdctl` to interact with the running cluster:

1. Store an example key-value pair in the cluster:

  ```
  $ ./etcdctl put foo bar
  OK
  ```

If OK is printed, storing the key-value pair is successful.

2. Retrieve the value of `foo`:

```
$ ./etcdctl get foo
bar
```

If `bar` is returned, interaction with the etcd cluster is working as expected.

Local multi-member cluster

Starting a cluster

A `Procfile` at the base of the etcd git repository is provided to easily configure a local multi-member cluster. To start a multi-member cluster, navigate to the root of the etcd source tree and perform the following:

1. Install `goreman` to control Procfile-based applications:

```
$ go install github.com/mattn/goreman@latest
```

The installation will place executables in the $GOPATH/bin. If $GOPATH environment variable is not set, the tool will be installed into the $HOME/go/bin. Make sure that $PATH is set accordingly in your environment.

2. Start a cluster with `goreman` using etcd's stock Procfile:

```
$ goreman -f Procfile start
```

The members start running. They listen on `localhost:2379`, `localhost:22379`, and `localhost:32379` respectively for client requests.

Interacting with the cluster

Use `etcdctl` to interact with the running cluster:

1. Print the list of members:

```
$ etcdctl --write-out=table --endpoints=localhost:2379 member list
```

The list of etcd members is displayed as follows:

```
+------------------+---------+--------+-----------------------+-----------------------+
|        ID        | STATUS  |  NAME  |       PEER ADDRS      |      CLIENT ADDRS     |
+------------------+---------+--------+-----------------------+-----------------------+
| 8211f1d0f64f3269 | started | infra1 | http://127.0.0.1:2380  | http://127.0.0.1:2379  |
| 91bc3c398fb3c146 | started | infra2 | http://127.0.0.1:22380 | http://127.0.0.1:22379 |
| fd422379fda50e48 | started | infra3 | http://127.0.0.1:32380 | http://127.0.0.1:32379 |
+------------------+---------+--------+-----------------------+-----------------------+
```

2. Store an example key-value pair in the cluster:

```
$ etcdctl put foo bar
OK
```

If OK is printed, storing the key-value pair is successful.

###
Testing fault tolerance

To exercise etcd's fault tolerance, kill a member and attempt to retrieve the key.

1. Identify the process name of the member to be stopped.

The `Procfile` lists the properties of the multi-member cluster. For example, consider the member with the process name, `etcd2`.

2. Stop the member:

```
# kill etcd2
$ goreman run stop etcd2
```

3. Store a key:

```
$ etcdctl put key hello
OK
```

4. Retrieve the key that is stored in the previous step:

```
$ etcdctl get key
```

hello
```

5. Retrieve a key from the stopped member:

```
$ etcdctl --endpoints=localhost:22379 get key
```

The command should display an error caused by connection failure:

```
2017/06/18 23:07:35 grpc: Conn.resetTransport failed to create client transport: connection error: desc =
"transport: dial tcp 127.0.0.1:22379: getsockopt: connection refused"; Reconnecting to "localhost:22379"
Error:  grpc:
timed out trying to connect
```

6. Restart the stopped member:

```
$ goreman run restart etcd2
```

7. Get the key from the restarted member:

```
$ etcdctl --endpoints=localhost:22379 get key
hello
```

Restarting the member re-establishs the connection. `etcdctl` will now be able to retrieve the key successfully. To learn more about interacting with etcd, read [interacting with etcd section][interacting].

[clustering]: https://etcd.io/docs/latest/op-guide/clustering/
[interacting]: https://etcd.io/docs/latest/dev-guide/interacting_v3/
Branch management

Guide

* New development occurs on the [main branch][main].
* The main branch should always have a green build!
* Backwards-compatible bug fixes should target the main branch and subsequently be ported to stable branches.
* Once the main branch is ready for release, it will be tagged and become the new stable branch.

The etcd team has adopted a *rolling release model* and supports two stable versions of etcd.

Main branch
```

The `main` branch is our development branch. All new features land here first.

To try new and experimental features, pull `main` and play with it. Note that `main` may not be stable because new features may introduce bugs.

Before the release of the next stable version, feature PRs will be frozen. A [release manager](./release.md#release-management) will be assigned to the major/minor version and will lead the etcd community in testing, bug-fix, and documentation of the release for one to two weeks.

Stable branches

All branches with
the prefix `release-` are considered _stable_ branches.

After every minor release (semver.org), we will have a new stable branch for that release, managed by a [patch release manager](./release.md#release-management). We will keep fixing the backward-compatible bugs for the latest two stable releases. A _patch_ release to each supported release branch, incorporating any bug fixes, will be once every two weeks, given any patches.

[main]: https://github.com/etcd-io/etcd/tree/main
Issue triage guidelines

Purpose

Speed up issue management.

The `etcd` issues are listed at <https://github.com/etcd-io/etcd/issues> and are identified with labels. For example, an issue that is identified as a bug will be set to the label `type/bug`.

The etcd project uses labels to indicate common attributes such as `area`, `type`, and `priority` of incoming issues.

New issues will often start without any labels, but typically `etcd` maintainers, reviewers, and members will add labels by following these triage guidelines. The detailed list of labels can be found at <https://github.com/etcd-io/etcd/labels>.

Scope

This document serves as the primary guidelines for triaging incoming issues in `etcd`.

All contributors are encouraged and welcome to help manage issues which will help reduce the burden on project maintainers, though the work and responsibilities discussed in this document are created with `etcd` project reviewers and members in mind as these individuals will have
triage access to the etcd project which is a requirement for actions like applying labels or closing issues.

Refer to [etcd community membership](https://github.com/etcd-io/etcd/blob/main/Documentation/contributor-guide/community-membership.md) for guidance on becoming an etcd project member or reviewer.

Step 1 - Find an issue to triage

To get started you can use the following recommended issue searches to identify issues that are in need of triage:

* [Issues that have no labels](https://github.com/etcd-io/etcd/issues?q=is%3Aissue+is%3Aopen+sort%3Aupdated+no%3Alabel)
* [Issues created recently](https://github.com/etcd-io/etcd/issues?q=is%3Aissue+is%3Aopen+)
* [Issues not assigned but linked pr](https://github.com/etcd-io/etcd/issues?q=is%3Aopen+is%3Aissue+no%3Aassignee+linked%3Apr)
* [Issues with no comments](https://github.com/etcd-io/etcd/issues?q=is%3Aopen+is%3Aissue+comments%3A0+)
* [Issues with help wanted](https://github.com/etcd-io/etcd/issues?q=is%3Aopen+is%3Aissue+label%3A%22help+wanted%22+)

##
Step 2 - Check the issue is valid

Before we start adding labels or trying to work out a priority, our first triage step needs to be working out if the issue actually belongs to the etcd project and is not a duplicate.

Issues that don't belong to etcd

Sometimes issues are reported that belong to other projects that `etcd` use. For example, `grpc` or `golang` issues. Such issues should be addressed by asking the reporter to open issues in the appropriate other projects.

These issues can generally be closed unless a maintainer and issue reporter see a need to keep it open for tracking purposes. If you have triage permissions please close it, alternatively mention the @etcd-io/members group to request a member with triage access to close the issue.

Duplicate issues

If an issue is a duplicate, add a comment stating so along with a reference for the original issue and if you have triage permissions please close it, alternatively mention the @etcd-io/members
group to request a member with triage access close the issue.

Step 3 - Apply the appropriate type of label

Adding a `type` label to an issue helps create visibility on the health of the project and helps contributors identify potential priorities, i.e. addressing existing bugs or test flakes before implementing new features.

Support requests

As a general rule, the focus for etcd support is to address common themes in a broad way that helps all users, i.e. through channels like known issues, frequently asked questions, and high-quality documentation. To make the best use of project members time we should avoid providing 1:1 support if a broad approach is available.

Some people mistakenly use our GitHub bug report or feature request templates to file support requests. Usually, they are asking for help operating or configuring some aspect of etcd. Support requests for etcd should instead be raised as [discussions](https://github.com/etcd-io/etcd/discussions).

Common
types of support requests are:

1. Questions about configuring or operating existing well-documented etcd features, for example, <https://github.com/etcd-io/etcd/issues/15945>. Note - If an existing feature is not well documented please apply the `area/documentation` label and propose documentation improvements that would prevent future users from stumbling on the problem again.

2. Bug reports or questions about unsupported versions of etcd, for example <https://github.com/etcd-io/etcd/issues/15796>. When responding to these issues please refer to our [supported versions documentation](https://etcd.io/docs/latest/op-guide/versioning) and encourage the reporter to upgrade to a recent patch release of a supported version as soon as possible. We should limit the effort supporting users that do not make the effort to run a supported version of etcd or ensure their version is patched.

3. Bug reports that do not provide a complete list of steps to reproduce the issue and/or contributors
are not able to reproduce the issue, for example, <https://github.com/etcd-io/etcd/issues/15740>. We should limit the effort we put into reproducing issues ourselves and motivate users to provide the necessary information to accept the bug report.

4. General questions that are filed using feature request or bug report issue templates, for example, <https://github.com/etcd-io/etcd/issues/15914>. Note - These types of requests may surface good additions to our [frequently asked questions](https://etcd.io/docs/v3.5/faq).

If you identify that an issue is a support request please:

1. Add the `type/support` or `type/question` label.

2. Add the following comment to inform the issue creator that discussions should be used instead and that this issue will be converted to a discussion.

> Thank you for your question, this support issue will be moved to our [Discussion Forums](https://github.com/etcd-io/etcd/discussions).
>
> We are trying to consolidate the channels to which
questions for help/support are posted so that we can improve our efficiency in responding to your requests, and make it easier for you to find answers to frequently asked questions and how to address common use cases.
>
> We regularly see messages posted in multiple forums, with the full response thread only in one place or, worse, spread across multiple forums. Also, the large volume of support issues on GitHub is making it difficult for us to use issues to identify real bugs.
>
> Members of the etcd community use Discussion Forums to field support requests. Before posting a new question, please search these for answers to similar questions, and also familiarize yourself with:
>
> 1. [user documentation](https://etcd.io/docs/latest)
> 2. [frequently asked questions](https://etcd.io/docs/v3.5/faq)
>
> Again, thanks for using etcd and raising this question.

>
> The etcd team

3. Finally, click `Convert to discussion` on the right-hand panel,
selecting the appropriate discussion category.

Bug reports

If an issue has been raised as a bug it should already have the `type/bug` label, however, if this is missing for an issue you determine to be a bug please add the label manually.

The next step is to validate if the issue is indeed a bug. If not, add a comment with the findings and close the trivial issue. For non-trivial issues, wait to hear back from the issue reporter and see if there is any objection. If the issue reporter does not reply in 30 days, close the issue.

If the problem can not be reproduced or requires more information, leave a comment for the issue reporter as soon as possible while the issue is fresh for the issue reporter.

Feature requests

New feature requests should be created via the etcd feature request template and in theory already have the `type/feature` label, however, if this is missing for an issue you determine to be a feature please add the label manually.

Test flakes

Test flakes
are a specific type of bug that the etcd project tracks separately as these are a priority to address. These should be created via the test flake template and in theory already have the `type/flake` label, however, if this is missing for an issue you determine to be related to a flaking test please add the label manually.

Step 4 - Define the areas impacted

Adding an `area` label to an issue helps create visibility on which areas of the etcd project require attention and helps contributors find issues to work on relating to their particular skills or knowledge of the etcd codebase.

If an issue crosses multiple domains please add additional `area` labels to reflect that.

Below is a brief summary of the area labels in active use by the etcd project along with any notes on their use:

Label	Notes
area/external	Tracking label for issues raised that are external to etcd.
area/community	
area/raft	
area/clientv3	
area/performance	

area/security	
area/tls	
area/auth	
area/etcdctl	
area/etcdutl	
area/contrib	Not to be confused with `area/community` this label is specifically
used for issues relating to community-maintained scripts or files in the `contrib/` directory which aren't part of the core etcd project.
area/documentation	
area/tooling	Generally used in relation to the third party / external utilities or tools that are used in various stages of the etcd build, test, or release process, for example, tooling to create sboms.
area/testing	
area/robustness-testing	

Step 5 - Prioritise the issue

If an issue lacks a priority label it has not been formally prioritized yet.

Adding a `priority` label helps the etcd project understand what is important and should be worked on now, and conversely, what is not as important and is on the project backlog.

Priority label	What it means	Examples
`priority/critical-urgent`
Maintainers are responsible for making sure that these issues (in their area) are being actively worked oni.e., drop what you're doing. The stuff is burning. These should be fixed before the next release.	user-visible critical bugs in core features broken builds on tier1 supported platforms tests and critical security issues
`priority/important-soon`	Must be staffed and worked on either currently or very soonideally in time for the next release.	
`priority/important-longterm`	Important over the long term, but may not be currently staffed and/or may require multiple releases to complete.	
`priority/backlog`	General agreement that this is a nice-to-have, but no one's available to work on it anytime soon. Community contributions would be most welcome in the meantime, though it might take a while to get them reviewed if reviewers are fully occupied with higher-priority issuesfor example, immediately before a release.	
`priority/awaiting-more-evidence`
Possibly useful, but not yet enough support to actually get it done.	Mostly placeholders for potentially good ideas, so that they don't get completely forgotten, and can be referenced or deduped every time they come up

Step 6 - Support new contributors

As part of the `etcd` triage process once the `kind` and `area` have been determined, please consider if the issue would be suitable for a less experienced contributor. The `good first issue` label is a subset of the `help wanted` label, indicating that members have committed to providing extra assistance for new contributors. All `good first issue` items also have the `help wanted` label.

Help wanted

Items marked with the `help wanted` label need to ensure that they meet these criteria:

* **Low Barrier to Entry** - It should be easy for new contributors.

* **Clear** - The task is agreed upon and does not require further discussions in the community.

* **Goldilocks priority** - The priority
should not be so high that a core contributor should do it, but not too low that it isnt useful enough for a core contributor to spend time reviewing it, answering questions, helping get it into a release, etc.

Good first issue

Items marked with `good first issue` are intended for first-time contributors. It indicates that members will keep an eye out for these pull requests and shepherd it through our processes.

New contributors should not be left to find an approver, ping for reviews, decipher test commands, or identify that their build failed due to a flake. It is important to make new contributors feel welcome and valued. We should assure them that they will have an extra level of help with their first contribution.

After a contributor has successfully completed one or two `good first issue` items, they should be ready to move on to `help wanted` items.

* **No Barrier to Entry** - The task is something that a new contributor can tackle without advanced setup or domain knowledge.

*
Solution Explained - The recommended solution is clearly described in the issue.

* **Gives Examples** - Link to examples of similar implementations so new contributors have a reference guide for their changes.

* **Identifies Relevant Code** - The relevant code and tests to be changed should be linked in the issue.

* **Ready to Test** - There should be existing tests that can be modified, or existing test cases fit to be copied. If the area of code doesnt have tests, before labeling the issue, add a test fixture. This prep often makes a great help wanted task!

Step 7 - Follow up

Once initial triage has been completed, issues need to be re-evaluated over time to ensure they don't become stale incorrectly.

Track important issues

If an issue is at risk of being closed by the stale bot in the future, but is an important issue for the etcd project, then please apply the `stage/tracked` label and remove any `stale` labels that exist. This will ensure the project does
not lose sight of the issue.

Close incomplete issues

Issues that lack enough information from the issue reporter should be closed if the issue reporter does not provide information in 30 days. Issues can always be re-opened at a later date if new information is provided.

Check for incomplete work

If an issue owned by a developer has no pull request created in 30 days, contact the issue owner and kindly ask about the status of their work, or to release ownership on the issue if needed.
PR management

Purpose

Speed up PR management.

The `etcd` PRs are listed at https://github.com/etcd-io/etcd/pulls
A PR can have various labels, milestones, reviewers, etc. The detailed list of labels can be found at https://github.com/kubernetes/kubernetes/labels

Following are a few example searches on PR for convenience:
* [Open PRS for milestone etcd-v3.6](https://github.com/etcd-io/etcd/pulls?utf8=%E2%9C%93&q=is%3Apr+is%3Aopen+milestone%3Aetcd-v3.6)
* [PRs under investigation](https://github.com/etcd-io/etcd/labels/Investigating)

Scope

These guidelines serve as a primary document for managing PRs in `etcd`. Everyone is welcome to help manage PRs but the work and responsibilities discussed in this document are created with `etcd` maintainers and active contributors in mind.

Ensure tests are run

The etcd project use Kubernetes Prow and GitHub Actions to run tests. To ensure all required tests run if a pull request is ready for testing and still has the `needs-ok-to-test`
label then please comment on the pull request `/ok-to-test`.

Handle inactive PRs
Poke PR owner if review comments are not addressed in 15 days. If the PR owner does not reply in 90 days, update the PR with a new commit if possible. If not, inactive PR should be closed after 180 days.

Poke reviewer if needed

Reviewers are responsive in a timely fashion, but considering everyone is busy, give them some time after requesting a review if a quick response is not provided. If the response is not provided in 10 days, feel free to contact them via adding a comment in the PR or sending an email or message on Slack.

Verify important labels are in place

Make sure that appropriate reviewers are added to the PR. Also, make sure that a milestone is identified. If any of

these or other important labels are missing, add them. If a correct label cannot be decided, leave a comment for the maintainers to do so as needed.
Roadmap

etcd uses GitHub milestones to track all tasks in each major or minor release. The `roadmap.md` file only records the
most important tasks for each release. The list is based on the current maintainer capacity that may shift over time. Proposed milestones are what we think we can deliver with the people we have. If we have more support on the important
stuff, we could pick up more items from the backlog. Note that etcd will continue to mainly focus on technical debt over
the next few major or minor releases.

Each item has an assigned priority. Refer to [priority definitions](https://github.com/etcd-io/etcd/blob/main/Documentation/contributor-guide/triage_issues.md#step-5---prioritise-the-issue).

v3.6.0

For a full list of tasks in `v3.6.0`, please see [milestone etcd-v3.6](https://github.com/etcd-io/etcd/milestone/38).

Title	Priority	Status	Note
[Support downgrade](https://github.com/etcd-io/etcd/issues/11716)	priority/important-soon	In progress	etcd will support downgrade starting from 3.6.0. But it will also support offline downgrade from 3.5 to 3.4.
[StoreV2 deprecation](https://github.com/etcd-io/etcd/issues/12913)	priority/important-soon	In progress	This task will be covered in both 3.6 and 3.7.
[Release raft 3.6.0](https://github.com/etcd-io/raft/issues/89)	priority/important-soon	Not started	etcd 3.6.0 will depends on raft 3.6.0
[Release bbolt 1.4.0](https://github.com/etcd-io/bbolt/issues/553)	priority/important-soon	Not started	etcd 3.6.0 will depends on bbolt 1.4.0
[Support /livez and /readyz endpoints](https://github.com/etcd-io/etcd/issues/16007)	priority/important-longterm	In progress	It provides clearer APIs, and can also work around the stalled writes issue
[Bump gRPC](https://github.com/etcd-io/etcd/issues/16290)	priority/important-longterm	Completed	It isn't guaranteed to be resolved in 3.6, and might be postponed to 3.7 depending on the effort and risk.
[Deprecate grpc-gateway or bump it](https://github.com/etcd-io/etcd/issues/14499)	priority/important-longterm	Completed	It isn't guaranteed to be resolved in 3.6, and might be postponed to 3.7 depending on the effort and risk.
[bbolt: Add logger into bbolt](https://github.com/etcd-io/bbolt/issues/509)	priority/important-longterm	Completed	It's important to diagnose bbolt issues

| [bbolt: Add surgery commands](https://github.com/etcd-io/bbolt/issues/370) | priority/important-longterm | Completed | Surgery commands are important for fixing corrupted db files |
| [Evaluate and (Gradulate or deprecate/remove) experimental features](https://github.com/etcd-io/etcd/issues/16292) | priority/backlog | Not started | This task will be covered in both 3.6 and 3.7. |

v3.7.0

For a full list of tasks in `v3.7.0`, please see [milestone etcd-v3.7](https://github.com/etcd-io/etcd/milestone/39).

Title	Priority	Note
[StoreV2 deprecation](https://github.com/etcd-io/etcd/issues/12913)	P0	Finish the remaining tasks 3.7.
[Refactor lease: Lease might be revoked by mistake by old leader](https://github.com/etcd-io/etcd/issues/15247)	P1	to be investigated & discussed
[Integrate raft's new feature (async write) into etcd](https://github.com/etcd-io/etcd/issues/16291)	P1	It should improve the performance
[bbolt: Support customizing the bbolt rebalance threshold](https://github.com/etcd-io/bbolt/issues/422)	P2	It may get rid of etcd's defragmentation. Both bbolt and etcd need to be changed.
[Evaluate and (graduate or deprecate/remove) experimental features](https://github.com/etcd-io/etcd/issues/16292)	P2	Finish the remaining tasks 3.7.

Backlog (future releases)

Title	Priority	Note
[Remove the dependency on grpc-go's experimental API](https://github.com/etcd-io/etcd/issues/15145)		
[Protobuf: cleanup both golang/protobuf and gogo/protobuf](https://github.com/etcd-io/etcd/issues/14533)		
[Proposals should include a merkle root](https://github.com/etcd-io/etcd/issues/13839)		
[Add Distributed Tracing using OpenTelemetry](https://github.com/etcd-io/etcd/issues/12460)		
[Support CA rotation](https://github.com/etcd-io/etcd/issues/11555)		
[bbolt: Migrate all commands to cobra style commands](https://github.com/etcd-io/bbolt/issues/472)		
[raft: enhance the configuration change validation](https://github.com/etcd-io/raft/issues/80)		

Release

The guide talks about how to release a new version of etcd.

The procedure includes some manual steps for sanity checking, but it can probably be further scripted. Please keep this document up-to-date if making changes to the release process.

Release management

The following pool of release candidates manages the release of each etcd major/minor version as well as manages patches
to each stable release branch. They are responsible for communicating the timelines and status of each release and for ensuring the stability of the release branch.

- Benjamin Wang [@ahrtr](https://github.com/ahrtr)
- James Blair [@jmhbnz](https://github.com/jmhbnz)
- Marek Siarkowicz [@serathius](https://github.com/serathius)
- Sahdev Zala [@spzala](https://github.com/spzala)
- Wenjia Zhang [@wenjiaswe](https://github.com/wenjiaswe)

All release version numbers follow the format of [semantic versioning 2.0.0](http://semver.org/).

Major, minor version release, or its pre-release

- Ensure
 the relevant [milestone](https://github.com/etcd-io/etcd/milestones) on GitHub is complete. All referenced issues should be closed or moved elsewhere.
- Ensure the latest [upgrade documentation](https://etcd.io/docs/next/upgrades) is available.
- Bump [hardcoded MinClusterVerion in the repository](https://github.com/etcd-io/etcd/blob/v3.4.15/version/version.go#L29), if necessary.
- Add feature capability maps for the new version, if necessary.

Patch version release

- To request a backport, developers submit cherry-pick PRs targeting the release branch. The commits should not include merge commits. The commits should be restricted to bug fixes and security patches.
- The cherrypick PRs should target the appropriate release branch (`base:release-<major>-<minor>`). The k8s infra cherry pick robot `/cherrypick <branch>` PR chatops command may be used to automatically generate cherrypick PRs.
- The release patch manager reviews the cherrypick PRs. Please discuss carefully what is backported
 to the patch release. Each patch release should be strictly better than its predecessor.
- The release patch manager will cherry-pick these commits starting from the oldest one into stable branch.

Write a release note

- Write an introduction for the new release. For example, what major bug we fix, what new features we introduce, or what performance improvement we make.
- Put `[GH XXXX]` at the head of the change line to reference the Pull Request that introduces the change. Moreover, add a link on it to jump to the Pull Request.
- Find PRs with the `release-note` label and explain them in the `NEWS` file, as a straightforward summary of changes for end-users.

Patch release criteria

The etcd project aims to release a new patch version if any of the following conditions are met:

- Fixed one or more major CVEs (>=7.5).
- Fixed one or more critical bugs.
- Fixed three or more major bugs.
- Fixed five or more minor bugs.

Release guide

Prerequisites

There are some
 prerequisites, which should be done before the release process. These are one-time operations,
which don't need to be executed before releasing each version.
1. Generate a GPG key and add it to your GitHub account. Refer to the links on
[settings](https://github.com/settings/keys).
2. Ensure you have a Linux machine, on which the git, Golang, and docker have been installed.
   - Ensure the Golang version matches the version defined in `.go-version` file.
   - Ensure non-privileged users can run docker commands, refer to the [Linux
postinstall](https://docs.docker.com/engine/install/linux-postinstall/).
   - Ensure there is at least 5GB of free space on your Linux machine.
3. Install gsutil, refer to [gsutil_install](https://cloud.google.com/storage/docs/gsutil_install). When asked about cloud project to use, pick `etcd-development`.
4. Authenticate the image registry, refer to [Authentication methods](https://cloud.google.com/container-registry/docs/advanced-authentication).
  - `gcloud
 auth login`
  - `gcloud auth configure-docker`
5. Install gh, refer to [GitHub's documentation](https://github.com/cli/cli#installation). Ensure that running
  `gh auth login` succeeds for the GitHub account you use to contribute to etcd,
  and that `gh auth status` has a clean exit and doesn't show any issues.

Release steps

1. Raise an issue to publish the release plan, e.g. [issues/17350](https://github.com/etcd-io/etcd/issues/17350).
2. Raise a `kubernetes/org` pull request to temporarily elevate permissions for the GitHub release team.
3. Once permissions are elevated, temporarily relax [branch protections](https://github.com/etcd-io/etcd/settings/branches) to allow pushing changes directly to `release-*` branches in GitHub.
4. Verify you can pass the authentication to the image registries,
  - `docker login gcr.io`
  - `docker login quay.io`
    - If the release person doesn't have access to 1password, one of the owners (@ahrtr, @ivanvc, @jmhbnz, @serathius) needs
 to share the password with them per [this guide](https://support.1password.com/share-items/). See rough steps below,
      - [Sign in](https://team-etcd.1password.com/home) to your account on 1password.com.
      - Click `Your Vault Items` on the right side.
      - Select `Password of quay.io`.
      - Click `Share` on the top right, and set expiration as `1 hour` and only available to the release person using

his/her email.
    - Click `Copy Link` then send the link to the release person via slack or email.
5. Clone the etcd repository and checkout the target branch,
 - `git clone --branch release-3.X git@github.com:etcd-io/etcd.git`
6. Run the release script under the repository's root directory, replacing `${VERSION}` with a value without the `v` prefix, i.e. `3.5.13`.
 - `DRY_RUN=false ./scripts/release.sh ${VERSION}`
 - **NOTE:** When doing a pre-release (i.e., a version from the main branch, 3.6.0-alpha.2), you will need to explicitly set the branch to main:

 ```
  DRY_RUN=false BRANCH=main ./scripts/release.sh ${VERSION}
  ```

 It generates all release binaries under the directory `/tmp/etcd-release-${VERSION}/etcd/release/` and images. Binaries are pushed to the Google Cloud bucket
 under project `etcd-development`, and images are pushed to `quay.io` and `gcr.io`.
7. Publish the release page on GitHub
 - Open the **draft** release URL shown by the release script
 - Click the pen button at the top right to edit the release
 - Review that it looks correct, reviewing that the bottom checkboxes are checked depending on the release version (v3.4 no checkboxes, v3.5 has the set as latest release checkbox checked, v3.6 has the set as pre-release checkbox checked)
 - Then, publish the release
8. Announce to the etcd-dev googlegroup

 Follow the format of previous release emails sent to etcd-dev@googlegroups.com, see an example below. After sending out the email, ask one of the mailing list maintainers to approve the
 email from the pending list. Additionally, label the release email as `Release`.

```text
Hello,

etcd v3.4.30 is now public!

https://github.com/etcd-io/etcd/releases/tag/v3.4.30

Thanks to everyone who contributed to the release!

etcd team
```

9. Update the changelog to reflect the correct release date.
10. Paste the release link to the issue raised in Step 1 and close the issue.
11. Restore standard branch protection settings and raise a follow-up `kubernetes/org` pull request to return to least privilege permissions.
12. Crease a new stable branch through `git push origin release-${VERSION_MAJOR}.${VERSION_MINOR}` if this is a new major or minor stable release.

13. Re-generate a new password for quay.io if needed (e.g. shared to a contributor who isn't in the release team, and we should rotate the password at least once every 3 months).

Release known issues

1. Timeouts pushing binaries - If binaries fail to fully upload to Google Cloud storage, the script must be re-run using the same command. Any artifacts that are already pushed will be overwritten to ensure they are correct. The storage bucket does not use object versioning so incorrect files cannot remain.

2. Timeouts pushing images - It is rare, although possible for connection timeouts to occur when publishing etcd release images to `quay.io` or `gcr.io`. If this occurs, it is known to be safe to rerun the release script command appending the `--no-upload` flag, and image uploads will gracefully resume.

3. GPG vs SSH signing - The release scripts assume that git tags will be signed with a GPG key. Since 2022 GitHub has supported [signing commits and tags using ssh](https://github.blog/changelog/2022-08-23-ssh-commit-verification-now-supported). Until further release script updates are completed you will need to disable this feature in your `~/.gitconfig` and revert to signing via GPG to perform etcd releases.
Golang modules

The etcd project (since version 3.5) is organized into multiple
[golang modules](https://golang.org/ref/mod) hosted in a [single repository](https://golang.org/ref/mod#vcs-dir).

![modules graph](modules.svg)

There are the following modules:

- **go.etcd.io/etcd/api/v3** - contains API definitions
(like protos & proto-generated libraries) that defines communication protocol
between etcd clients and servers.

- **go.etcd.io/etcd/pkg/v3** - a collection of utility packages used by etcd
without being specific to etcd itself. A package belongs here
only if it could possibly be moved out into its own repository in the future.
Please avoid adding here code that has a lot of dependencies on its own, as
they automatically become dependencies of the client library
(that we want to keep lightweight).

- **go.etcd.io/etcd/client/v3** - client library used to contact etcd over
the network (grpc). Recommended for all new usage of etcd.

- **go.etcd.io/raft/v3**
- implementation of distributed consensus
protocol. Should have no etcd specific code. Hosted in a separate repository:
https://github.com/etcd-io/raft.

- **go.etcd.io/etcd/server/v3** - etcd implementation.
The code in this package is internal to etcd and should not be consumed
by external projects. The package layout and API can change within the minor versions.

- **go.etcd.io/etcd/etcdctl/v3** - a command line tool to access and manage etcd.

- **go.etcd.io/etcd/tests/v3** - a module that contains all integration tests of etcd.
  Notice: All unit tests (fast and not requiring cross-module dependencies)
  should be kept in the local modules of the code under the test.

- **go.etcd.io/bbolt** - implementation of persistent b-tree.
  Hosted in a separate repository: https://github.com/etcd-io/bbolt.

Operations

1. All etcd modules should be released in the same versions, e.g.
  `go.etcd.io/etcd/client/v3@v3.5.10` must depend on `go.etcd.io/etcd/api/v3@v3.5.10`.

   The consistent updating of versions can be performed using:
  ```shell script
  % DRY_RUN=false TARGET_VERSION="v3.5.10" ./scripts/release_mod.sh update_versions
  ```
2. The released modules should be tagged according to https://golang.org/ref/mod#vcs-version rules,
  i.e. each module should get its own tag.
  The tagging can be performed using:
  ```shell script
  % DRY_RUN=false REMOTE_REPO="origin" ./scripts/release_mod.sh push_mod_tags
  ```

3. All etcd modules should depend on the same versions of underlying dependencies.
  This can be verified using:
  ```shell script
  % PASSES="dep" ./test.sh
  ```

4. The go.mod files must not contain dependencies not being used and must
  conform to `go mod tidy` format.
  This is being verified by:
  ```
  % PASSES="mod_tidy" ./test.sh
  ```

5. To trigger actions across all modules (e.g. auto-format all files), please
  use/expand the following script:
  ```shell script
  % ./scripts/fix.sh
  ```

###

Future

As a North Star, we would like to evaluate etcd modules towards the following model:

![modules graph](modules-future.svg)

This assumes:
- Splitting etcdmigrate/etcdadm out of etcdctl binary.
  Thanks to this etcdctl would become clearly a command-line wrapper
  around network client API,
  while etcdmigrate/etcdadm would support direct physical operations on the
  etcd storage files.
- Splitting etcd-proxy out of ./etcd binary, as it contains more experimental code
  so carries additional risk & dependencies.
- Deprecation of support for v2 protocol.

Reporting bugs

If any part of the etcd project has bugs or documentation mistakes, please let us know by [opening an issue][etcd-issue]. We treat bugs and mistakes very seriously and believe no issue is too small. Before creating a bug report, please check that an issue reporting the same problem does not already exist.

To make the bug report accurate and easy to understand, please try to create bug reports that are:

- Specific. Include as many details as possible: which version, what environment, what configuration, etc. If the bug is related to running the etcd server, please attach the etcd log (the starting log with the etcd configuration is especially important).

- Reproducible. Include the steps to reproduce the problem. We understand some issues might be hard to reproduce, please include the steps that might lead to the problem. If possible, please attach the affected etcd data dir and stack trace to the bug report.

- Isolated. Please try to isolate and reproduce the bug with
minimum dependencies. It would significantly slow down the speed to fix a bug if too many dependencies are involved in a bug report. Debugging external systems that rely on etcd is out of scope, but we are happy to provide guidance in the right direction or help with using etcd itself.

- Unique. Do not duplicate existing bug reports.

- Scoped. One bug per report. Do not follow up with another bug inside one report.

It may be worthwhile to read [Elika Etemads article on filing good bug reports][filing-good-bugs] before creating a bug report.

We might ask for further information to locate a bug. A duplicated bug report will be closed.

Frequently asked questions

How to get a stack trace

``` bash
$ kill -QUIT $PID
```

How to get the etcd version

``` bash
$ etcd --version
```

How to get etcd configuration and log when it runs as systemd service etcd2.service

``` bash
$ sudo systemctl cat etcd2
$ sudo journalctl -u etcd2
```

Due to an upstream systemd bug, journald
may miss the last few log lines when its processes exit. If journalctl says etcd stopped without a fatal or panic message, try `sudo journalctl -f -t etcd2` to get the full log.

[etcd-issue]: https://github.com/etcd-io/etcd/issues/new
[filing-good-bugs]: http://fantasai.inkedblade.net/style/talks/filing-good-bugs/
Community membership

This doc outlines the various responsibilities of contributor roles in etcd.

| Role | Responsibilities | Requirements | Defined by
|
|---|---|---|---
---|
| Member | Active contributor in the community | Sponsored by 2 reviewers and multiple contributions
| etcd GitHub org member |
| Reviewer | Review contributions from other members | History of review and authorship |
[OWNERS] file reviewer entry |
| Maintainer | Set direction and priorities for the project | Demonstrated responsibility and excellent technical judgement | [OWNERS] file approver entry |

New contributors

New contributors should be welcomed to the community by existing members,
helped with
PR workflow, and directed to relevant documentation and
communication channels.

Established community members

Established community members are expected to demonstrate their adherence to the principles in this document, familiarity with project organization, roles, policies, procedures, conventions, etc., and technical and/or writing ability. Role-specific expectations, responsibilities, and requirements are enumerated below.

Member

Members are continuously active contributors to the community. They can have issues and PRs assigned to them. Members are expected to remain active contributors to the community.

Defined by: Member of the etcd GitHub organization.

Requirements

- Enabled [two-factor authentication] on their GitHub account
- Have made multiple contributions to the project or community. Contribution may include, but is not limited to:
  - Authoring or reviewing PRs on GitHub. At least one PR must be **merged**.
  - Filing or commenting on issues on GitHub
  - Contributing to community discussions (e.g. meetings, Slack, email discussion forums, Stack Overflow)
- Subscribed to [etcd-dev@googlegroups.com](https://groups.google.com/g/etcd-dev)
- Have read the [contributor guide]
- Sponsored by two active maintainers or reviewers.
  - Sponsors must be from multiple member companies to demonstrate integration across the community.
  - With no objections from other maintainers
- Open a [membership nomination] issue against the `kubernetes/org` repo
  - Ensure your sponsors are @mentioned on the issue
  - Make sure that the list of contributions included is representative of your work on the project.
- Members can be removed by a supermajority of the maintainers or can resign by notifying the maintainers.

Responsibilities and privileges

- Responsive to issues and PRs assigned to them
- Granted "triage access" to etcd project
- Active owner of code they have contributed (unless ownership is explicitly transferred)
  - Code is well-tested
  - Tests consistently pass
  - Addresses bugs or issues discovered after code is accepted

Note: Members who frequently contribute code are expected to proactively perform code reviews and work towards becoming a *reviewer*.

Reviewers

Reviewers are contributors who have demonstrated greater skill in
reviewing the code from other contributors. They are knowledgeable about both
the codebase and software engineering principles. Their LGTM counts towards
merging a code change into the project. A reviewer is generally on the ladder towards
maintainership.

Defined by: *reviewers* entry in the [OWNERS] file.

Requirements

- member for at least 3 months.
- Primary reviewer for at least 5 PRs to the codebase.
- Reviewed or contributed at least 20 substantial PRs to the codebase.
- Knowledgeable about the codebase.
- Sponsored by two active maintainers.
  - Sponsors must be from multiple member companies to demonstrate integration across the community.
  - With no objections from other maintainers
- Reviewers can be removed by a supermajority of the maintainers or can resign by notifying the maintainers.

Responsibilities and privileges

- Code reviewer status may be a precondition to accepting large code contributions
- Responsible for project quality control via code reviews
  - Focus on code quality and correctness, including testing and factoring
  - May also review for more holistic issues, but not a requirement
- Expected to be responsive to review requests
- Assigned PRs to review related to area of expertise
- Assigned test bugs related to area of expertise
- Granted "triage access" to etcd project

Maintainers

Maintainers are first and foremost contributors who have shown they
are committed to the long-term success of a project. Maintainership is about building
trust with the current maintainers and being a person that they can
depend on to make decisions in the best interest of the project in a consistent manner.

Defined by: *approvers* entry in the [OWNERS] file.

Requirements

- Deep understanding of the technical goals and direction of the project
- Deep understanding of the technical domain of the project
- Sustained contributions to design and direction by doing all of:
  - Authoring and reviewing proposals

  - Initiating, contributing, and resolving discussions (emails, GitHub issues, meetings)
  - Identifying subtle or complex issues in the designs and implementation of PRs
- Directly contributed to the project through implementation and/or review
- Sponsored by two active maintainers and elected by supermajority
  - Sponsors must be from multiple member companies to demonstrate integration across the community.
- To become a maintainer send an email with your candidacy to etcd-maintainers-private@googlegroups.com
  - Ensure your sponsors are @mentioned in the email
  - Include a list of contributions representative of your work on the project.
  -
 Existing maintainers vote will privately and respond to the email with either acceptance or feedback for suggested improvement.
- With your membership approved you are expected to:
 - Open a PR and add an entry to the [OWNERS] file
 - Subscribe to etcd-maintainers@googlegroups.com and etcd-maintainers-private@googlegroups.com
 - Request to join [etcd-maintainer teams of etcd organization of GitHub](https://github.com/orgs/etcd-io/teams/maintainers-etcd)
 - Request to join the private slack channel for etcd maintainers on [kubernetes slack](http://slack.kubernetes.io/)
 - Request access to etcd-development GCP project where we publish releases
 - Request access to passwords shared between maintainers

Responsibilities and privileges

- Make and approve technical design decisions
- Set technical direction and priorities
- Define milestones and releases
- Mentor and guide reviewers, and contributors to the project.
- Participate when called upon in the [security disclosure and
 release process]
- Ensure the continued health of the project
  - Adequate test coverage to confidently release
  - Tests are passing reliably (i.e. not flaky) and are fixed when they fail
- Ensure a healthy process for discussion and decision-making is in place.
- Work with other maintainers to maintain the project's overall health and success holistically

Retiring

Life priorities, interests, and passions can change. Maintainers can retire and
move to [emeritus maintainers]. If a maintainer needs to step down, they should
inform other maintainers and, if possible, help find someone to pick up the related
work. At the very least, ensure the related work can be continued. Afterward,
they can remove themselves from the list of existing maintainers.

If a maintainer has not been performing their duties for 12 months,
they can be removed by other maintainers. In that case, the inactive maintainer will
be first notified via an email. If the situation doesn't improve, they will be
removed.
 If an emeritus maintainer wants to regain an active role, they can do
so by renewing their contributions. Active maintainers should welcome such a move.

Retiring other maintainers or regaining the status should require the approval
of at least two active maintainers.

Acknowledgements

Contributor roles and responsibilities were written based on [Kubernetes community membership]

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Logging Conventions

etcd uses the [zap][zap] library for logging application output categorized into *levels*. A log message's level is determined according to these conventions:

* Debug: Everything is still fine, but even common operations may be logged, and less helpful but more quantity of notices. Usually not used in production.
* Examples:
  * Send a normal message to a remote peer
  * Write a log entry to disk

* Info: Normal, working log information, everything is fine, but helpful notices for auditing or common operations. Should rather not be logged more frequently than once per a few seconds in a normal server's operation.
 * Examples:
   * Startup configuration
   * Start to do a snapshot

* Warning: (Hopefully) Temporary conditions that may cause errors, but may work fine. A replica disappearing (that may reconnect) is a warning.
 * Examples:
   * Failure to send a raft message to a remote peer
   * Failure to receive heartbeat message within the configured election
 timeout

* Error: Data has been lost, a request has failed for a bad reason, or a required resource has been lost.
 * Examples:
   * Failure to allocate disk space for WAL

* Panic: Unrecoverable or unexpected error situation that requires stopping execution.
 * Examples:
   * Failure to create the database

* Fatal: Unrecoverable or unexpected error situation that requires immediate exit. Mostly used in the test.
 * Examples:
   * Failure to find the data directory
   * Failure to run a test function

[zap]: https://github.com/uber-go/zap
Dependency management

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Main branch

The dependabot is enabled & [configured](https://github.com/etcd-io/etcd/blob/main/.github/dependabot.yml) to manage dependencies for etcd `main` branch. But dependabot doesn't work well for multi-module repository like `etcd`,

see [dependabot-core/issues/6678](https://github.com/dependabot/dependabot-core/issues/6678).
Usually, human intervention is required
 each time when dependabot automatically opens some PRs to bump dependencies.
Please see the guidance below.

Dependencies used in workflows

The PRs that automatically bump dependencies (see examples below) used in workflows are fine and can be approved & merged directly as long as all checks are successful.

- [build(deps): bump github/codeql-action from 2.2.11 to 2.2.12](https://github.com/etcd-io/etcd/pull/15736)
- [build(deps): bump actions/checkout from 3.5.0 to 3.5.2](https://github.com/etcd-io/etcd/pull/15735)
- [build(deps): bump ossf/scorecard-action from 2.1.2 to 2.1.3](https://github.com/etcd-io/etcd/pull/15607)

Bumping order

When multiple etcd modules depend on the same package, please bump the package version for all the modules in the correct order. The rule is simple:
if module A depends on module B, then bump the dependency for module B before module A. If the two modules do not depend on each other, then
it doesn't matter to bump which module first. For
 example, multiple modules depend on `github.com/spf13/cobra`, so we need to bump the dependency
in the following order,

- go.etcd.io/etcd/pkg/v3
- go.etcd.io/etcd/server/v3
- go.etcd.io/etcd/etcdctl/v3
- go.etcd.io/etcd/etcdutl/v3
- go.etcd.io/etcd/tests/v3
- go.etcd.io/etcd/v3
- go.etcd.io/etcd/tools/v3

For more details about etcd Golang modules, please check <https://etcd.io/docs/next/dev-internal/modules>

Note the module `go.etcd.io/etcd/tools/v3` doesn't depend on any other modules, nor by any other modules, so it doesn't matter when to bump dependencies for it.

Steps to bump a dependency

Use the `github.com/spf13/cobra` as an example, follow the steps below to bump it from 1.6.1 to 1.7.0 for module `go.etcd.io/etcd/etcdctl/v3`,

```bash
cd ${ETCD_ROOT_DIR}/etcdctl
go get github.com/spf13/cobra@v1.7.0
go mod tidy
cd ..
./scripts/fix.sh
```

Execute the same steps for all other modules. When you finish bumping the dependency for all modules, then commit the change,

```bash
git
 add .
git commit --signoff -m "dependency: bump github.com/spf13/cobra from 1.6.1 to 1.7.0"
```

Please close the related PRs which were automatically opened by dependabot.

When you bump multiple dependencies in one PR, it's recommended to create a separate commit for each dependency. But it isn't a must; for example,
you can get all dependencies bumping for the module `go.etcd.io/etcd/tools/v3` included in one commit.

Troubleshooting

In an event of bumping the version of protoc, protoc plugins or grpc-gateway, it might change `*.proto` file which can result in the following error:

```bash
[0;31mFAIL: 'genproto' FAILED at Wed Jul 31 07:09:08 UTC 2024
make: *** [Makefile:134: verify-genproto] Error 255
```

To fix the above error, run the following script from the root of etcd repository:

```bash
./scripts/genproto.sh
```

Indirect dependencies

Usually, we don't bump a dependency if all modules just indirectly depend on it, such as `github.com/go-logr/logr`.

If
 an indirect dependency (e.g. `D1`) causes any CVE or bugs that affect etcd, usually the module (e.g. `M1`, not part of etcd, but used by etcd)
which depends on it should bump the dependency (`D1`), and then etcd just needs to bump `M1`. However, if the module (`M1`) somehow doesn't
bump the problematic dependency, then etcd can still bump it (`D1`) directly following the same steps above. But as a long-term solution, etcd should
try to remove the dependency on such module (`M1`) that lack maintenance.

For mixed cases, in which some modules directly while others indirectly depend on a dependency, we have multiple options,

- Bump the dependency for all modules, no matter it's direct or indirect dependency.
- Bump the dependency only for modules that directly depend on it.

We should try to follow the first way, and temporarily fall back to the second one if we run into any issue on the first way. Eventually we
should fix the issue and ensure all modules depend on the same version of the
dependency.

Known incompatible dependency updates

arduino/setup-protoc

Please refer to [build(deps): bump arduino/setup-protoc from 1.3.0 to 2.0.0](https://github.com/etcd-io/etcd/pull/16016)

Rotation worksheet

The dependabot scheduling interval is weekly; it means dependabot will automatically raise a bunch of PRs per week.
Usually, human intervention is required each time. We have a [rotation worksheet](https://docs.google.com/spreadsheets/d/1jodHIO7Dk2VWTs1IRnfMFaRktS9IH8XRyifOnPdSY8I/edit#gid=1394774387),
and everyone is welcome to participate; you just need to register your name in the worksheet.

Stable branches

Usually, we don't proactively bump dependencies for stable releases unless there are any CVEs or bugs that affect etcd.

If we have to do it, then follow the same guidance above. Note that there is no `./scripts/fix.sh` in release-3.4, so no need to
execute it for 3.4.

Golang versions

The etcd project aims to maintain a development branch that
is on the latest [Go version](https://go.dev/dl), ideally, this will align with the Go version in use for Kubernetes project development. For an example of how to update etcd to a new minor release of Go refer to issue <https://github.com/etcd-io/etcd/issues/16393> and the linked pull requests.

Suggested steps for performing a minor version upgrade for the etcd development branch:

1. Carefully review new Go version release notes and potentially related blog posts for any deprecations, performance impacts, or other considerations.
2. Create a GitHub issue to signal intent to upgrade and invite discussion, for example, <https://github.com/etcd-io/etcd/issues/16393>.
3. Complete the upgrade locally in your development environment by editing `.go-version` and running `make fix`.
4. Run performance benchmarks locally to compare before and after.

5. Raise a pull request for the changes, for example, <https://github.com/etcd-io/etcd/pull/16394>.

Stable etcd release branches will be maintained
 to stay on the latest patch release of a supported Go version. Upgrading minor versions will be completed before the minor version in use currently is no longer supported. Refer to the [Go release
policy](https://go.dev/doc/devel/release).

For an example of how to update etcd to a new patch release of Go refer to issue <https://github.com/etcd-io/etcd/issues/16343> and the linked pull requests.

References:

- <https://github.com/kubernetes/sig-release/blob/master/release-engineering/handbooks/go.md>

Core dependencies mappings

[bbolt](https://github.com/etcd-io/bbolt) and [raft](https://github.com/etcd-io/raft) are two core dependencies of etcd.

Both etcd 3.4.x and 3.5.x depend on bbolt 1.3.x, and etcd 3.6.x (`main` branch) depends on bbolt 1.4.x.

raft is included in the etcd repository for release-3.4 and release-3.5 branches, so etcd 3.4.x and 3.5.x do not depend on any
external raft module. We moved raft into [a separate repository](https://github.com/etcd-io/raft) starting
 from 3.6 (`main` branch), and the first raft
release will be v3.6.0, so etcd 3.6.x will depend on raft 3.6.x.

Please see the table below:

etcd versions	bbolt versions	raft versions
3.4.x	v1.3.x	N/A
3.5.x	v1.3.x	N/A
3.6.x	v1.4.x	v3.6.x

1.157 etcd-api 3.6.0

1.157.1 Available under license :

Features

This document provides an overview of etcd features and general development guidelines for adding and deprecating them. The project maintainers can override these guidelines per the need of the project following the project governance.

Overview

The etcd features fall into three stages, experimental, stable, and unsafe.

Experimental

Any new feature is usually added as an experimental feature. An experimental feature is characterized as below:
- Might be buggy due to a lack of user testing. Enabling the feature may not work as expected.
- Disabled by default when added initially.
- Support for such a feature may be dropped at any time without notice
  - Feature-related issues may be given lower priorities.
  - It can be removed in the next minor or major release without following the feature deprecation policy unless it graduates to a stable future.

Stable

A stable feature is characterized as below:
- Supported as part of the supported releases of etcd.
-
May be enabled by default.
- Discontinuation of support must follow the feature deprecation policy.

Unsafe

Unsafe features are rare and listed under the `Unsafe feature:` section in the etcd usage documentation. By default, they are disabled. They should be used with caution following documentation. An unsafe feature can be removed in the next minor or major release without following the feature deprecation policy.

Development Guidelines

Adding a new feature

Any new enhancements to the etcd are typically added as an experimental feature. The general development requirements are listed below. They can be somewhat flexible depending on the scope of the feature and review discussions and will evolve over time.
- Open an issue
  - It must provide a clear need for the proposed feature.
  - It should list development work items as checkboxes. There must be one work item towards future graduation to a stable future.
  - Label the issue with `type/feature` and `experimental`.
  - Keep the issue open for tracking purposes until a decision is made on graduation.
- Open a Pull Request (PR)
  - Provide unit tests. Integration tests are also recommended as possible.
  - Provide robust e2e test coverage. If the feature being added is complicated or quickly needed, maintainers can decide to go with e2e tests for basic coverage initially and have robust coverage added at a later time before the feature graduation to the stable feature.
  - Provide logs for proper debugging.
  - Provide metrics and benchmarks as needed.
  - The Feature should be disabled by default.
  - Any configuration flags related to the implementation of the feature must be prefixed with `experimental` e.g. `--experimental-feature-name`.

  - Add a CHANGELOG entry.
- At least two maintainers must approve feature requirements and related code changes.

Graduating an Experimental feature to Stable

It is important that experimental features don't get stuck in that stage.
They should be revisited and moved to the stable stage following the graduation steps as described here.

Locate graduation candidate
Decide if an experimental feature is ready for graduation to the stable stage.
- Find the issue that was used to enable the experimental feature initially. One way to find such issues is to search for issues with `type/feature` and `experimental` labels.
- Fix any known open issues against the feature.
- Make sure the feature was enabled for at least one previous release. Check the PR(s) reference from the issue to see when the feature-related code changes were merged.

Provide implementation
If an experimental feature is found ready for graduation to the stable stage, open a Pull Request (PR) with the following changes.
- Add robust e2e tests if not already provided.
- Add a new stable feature flag identical to the experimental feature flag but without the `--experimental` prefix.
- Deprecate the experimental feature following the [feature deprecation
policy](#Deprecating-a-feature).
- Implementation must ensure that both the graduated and deprecated experimental feature flags work as expected. Note that both these flags will co-exist for the timeframe described in the feature deprecation policy.
- Enable the graduated feature by default if needed.

At least two maintainers must approve the work. Patch releases should not be considered for graduation.

Deprecating a feature

Experimental
An experimental feature deprecates when it graduates to the stable stage.
- Add a deprecation message in the documentation of the experimental feature with a recommendation to use a related stable feature. e.g. `DEPRECATED. Use <feature-name> instead.`
- Add a `deprecated` label in the issue that was initially used to enable the experimental feature.

Stable
As the project evolves, a stable feature may sometimes need to be deprecated and removed. Such a situation should be handled using the steps below:
- Create an issue for tracking
purposes.
- Add a deprecation message in the feature usage documentation before a planned release for feature deprecation. e.g. `To be deprecated in <release>.`. If a new feature replaces the `To be deprecated` feature, then also provide a message saying so. e.g. `Use <feature-name> instead.`.
- Deprecate the feature in the planned release with a message as part of the feature usage documentation. e.g. `DEPRECATED`. If a new feature replaces the deprecated feature, then also provide a message saying so. e.g. `DEPRECATED. Use <feature-name> instead.`.

- Add a `deprecated` label in the related issue.

Remove the deprecated feature in the following release. Close any related issue(s). At least two maintainers must approve the work. Patch releases should not be considered for deprecation.
Set up the local cluster

For testing and development deployments, the quickest and easiest way is to configure a local cluster. For a production deployment, refer to the [clustering][clustering] section.

Local standalone cluster

Starting a cluster

Run the following to deploy an etcd cluster as a standalone cluster:

```
$ ./etcd
...
```

If the `etcd` binary is not present in the current working directory, it might be located either at `$GOPATH/bin/etcd` or at `/usr/local/bin/etcd`. Run the command appropriately.

The running etcd member listens on `localhost:2379` for client requests.

Interacting with the cluster

Use `etcdctl` to interact with the running cluster:

1. Store an example key-value pair in the cluster:

```
$ ./etcdctl put foo bar
OK
```

If OK is printed, storing the key-value pair is successful.

2. Retrieve the value of `foo`:

```
$ ./etcdctl get foo
bar
```

If `bar` is returned, interaction with the etcd
cluster is working as expected.

Local multi-member cluster

Starting a cluster

A `Procfile` at the base of the etcd git repository is provided to easily configure a local multi-member cluster. To start a multi-member cluster, navigate to the root of the etcd source tree and perform the following:

1. Install `goreman` to control Procfile-based applications:

```
$ go install github.com/mattn/goreman@latest
```

The installation will place executables in the $GOPATH/bin. If $GOPATH environment variable is not set, the tool will be installed into the $HOME/go/bin. Make sure that $PATH is set accordingly in your environment.

2. Start a cluster with `goreman` using etcd's stock Procfile:

```
$ goreman -f Procfile start
```

The members start running. They listen on `localhost:2379`, `localhost:22379`, and `localhost:32379` respectively for client requests.

Interacting with the cluster

Use `etcdctl` to interact with the running cluster:

1. Print
the list of members:

```
$ etcdctl --write-out=table --endpoints=localhost:2379 member list
```

The list of etcd members is displayed as follows:

```
+------------------+---------+--------+-----------------------+-----------------------+
|        ID        | STATUS  |  NAME  |      PEER ADDRS       |     CLIENT ADDRS      |
+------------------+---------+--------+-----------------------+-----------------------+
| 8211f1d0f64f3269 | started | infra1 | http://127.0.0.1:2380  | http://127.0.0.1:2379  |
| 91bc3c398fb3c146 | started | infra2 | http://127.0.0.1:22380 | http://127.0.0.1:22379 |
| fd422379fda50e48 | started | infra3 | http://127.0.0.1:32380 | http://127.0.0.1:32379 |
+------------------+---------+--------+-----------------------+-----------------------+
```

2. Store an example key-value pair in the cluster:

```
$ etcdctl put foo bar
OK
```

If OK is printed, storing the key-value pair is successful.

###
Testing fault tolerance

To exercise etcd's fault tolerance, kill a member and attempt to retrieve the key.

1. Identify the process name of the member to be stopped.

The `Procfile` lists the properties of the multi-member cluster. For example, consider the member with the process name, `etcd2`.

2. Stop the member:

```
# kill etcd2
$ goreman run stop etcd2
```

3. Store a key:

```
$ etcdctl put key hello
OK
```

4. Retrieve the key that is stored in the previous step:

```
$ etcdctl get key
hello
```

5. Retrieve a key from the stopped member:

```
$ etcdctl --endpoints=localhost:22379 get key
```

The command should display an error caused by connection failure:

```
2017/06/18 23:07:35 grpc: Conn.resetTransport failed to create client transport: connection error: desc =
```

"transport: dial tcp 127.0.0.1:22379: getsockopt: connection refused"; Reconnecting to "localhost:22379"
  Error: grpc:
timed out trying to connect
  ```
6. Restart the stopped member:

  ```
  $ goreman run restart etcd2
  ```

7. Get the key from the restarted member:

  ```
  $ etcdctl --endpoints=localhost:22379 get key
  hello
  ```

  Restarting the member re-establishs the connection. `etcdctl` will now be able to retrieve the key successfully. To learn more about interacting with etcd, read [interacting with etcd section][interacting].

[clustering]: https://etcd.io/docs/latest/op-guide/clustering/
[interacting]: https://etcd.io/docs/latest/dev-guide/interacting_v3/
Branch management

Guide

* New development occurs on the [main branch][main].
* The main branch should always have a green build!
* Backwards-compatible bug fixes should target the main branch and subsequently be ported to stable branches.
* Once the main branch is ready for release, it will be tagged and become the new stable branch.

The etcd team has adopted a *rolling release model* and supports two stable versions of etcd.

Main branch

The `main` branch is our development branch. All new features land here first.

To try new and experimental features, pull `main` and play with it. Note that `main` may not be stable because new features may introduce bugs.

Before the release of the next stable version, feature PRs will be frozen. A [release manager](./release.md#release-management) will be assigned to the major/minor version and will lead the etcd community in testing, bug-fix, and documentation of the release for one to two weeks.

Stable branches

All branches with
  ```

the prefix `release-` are considered _stable_ branches.

After every minor release (semver.org), we will have a new stable branch for that release, managed by a [patch release manager](./release.md#release-management). We will keep fixing the backward-compatible bugs for the latest two stable releases. A _patch_ release to each supported release branch, incorporating any bug fixes, will be once every two weeks, given any patches.

[main]: https://github.com/etcd-io/etcd/tree/main
Issue triage guidelines

Purpose

Speed up issue management.

The `etcd` issues are listed at <https://github.com/etcd-io/etcd/issues> and are identified with labels. For example, an issue that is identified as a bug will be set to the label `type/bug`.

The etcd project uses labels to indicate common attributes such as `area`, `type`, and `priority` of incoming issues.

New issues will often start without any labels, but typically `etcd` maintainers, reviewers, and members will add labels by following these triage guidelines. The detailed list of labels can be found at <https://github.com/etcd-io/etcd/labels>.

Scope

This document serves as the primary guidelines for triaging incoming issues in `etcd`.

All contributors are encouraged and welcome to help manage issues which will help reduce the burden on project maintainers, though the work and responsibilities discussed in this document are created with `etcd` project reviewers and members in mind as these individuals will have
triage access to the etcd project which is a requirement for actions like applying labels or closing issues.

Refer to [etcd community membership](https://github.com/etcd-io/etcd/blob/main/Documentation/contributor-guide/community-membership.md) for guidance on becoming an etcd project member or reviewer.

Step 1 - Find an issue to triage

To get started you can use the following recommended issue searches to identify issues that are in need of triage:

* [Issues that have no labels](https://github.com/etcd-io/etcd/issues?q=is%3Aissue+is%3Aopen+sort%3Aupdated+no%3Alabel)
* [Issues created recently](https://github.com/etcd-io/etcd/issues?q=is%3Aissue+is%3Aopen+)
* [Issues not assigned but linked pr](https://github.com/etcd-io/etcd/issues?q=is%3Aopen+is%3Aissue+no%3Aassignee+linked%3Apr)
* [Issues with no comments](https://github.com/etcd-io/etcd/issues?q=is%3Aopen+is%3Aissue+comments%3A0+)
* [Issues with help wanted](https://github.com/etcd-io/etcd/issues?q=is%3Aopen+is%3Aissue+label%3A%22help+wanted%22+)

##
Step 2 - Check the issue is valid

Before we start adding labels or trying to work out a priority, our first triage step needs to be working out if the issue actually belongs to the etcd project and is not a duplicate.

Issues that don't belong to etcd

Sometimes issues are reported that belong to other projects that `etcd` use. For example, `grpc` or `golang` issues. Such issues should be addressed by asking the reporter to open issues in the appropriate other projects.

These issues can generally be closed unless a maintainer and issue reporter see a need to keep it open for tracking purposes. If you have triage permissions please close it, alternatively mention the @etcd-io/members group to request a member with triage access to close the issue.

Duplicate issues

If an issue is a duplicate, add a comment stating so along with a reference for the original issue and if you have triage permissions please close it, alternatively mention the @etcd-io/members
group to request a member with triage access close the issue.

Step 3 - Apply the appropriate type of label

Adding a `type` label to an issue helps create visibility on the health of the project and helps contributors identify potential priorities, i.e. addressing existing bugs or test flakes before implementing new features.

Support requests

As a general rule, the focus for etcd support is to address common themes in a broad way that helps all users, i.e. through channels like known issues, frequently asked questions, and high-quality documentation. To make the best use of project members time we should avoid providing 1:1 support if a broad approach is available.

Some people mistakenly use our GitHub bug report or feature request templates to file support requests. Usually, they are asking for help operating or configuring some aspect of etcd. Support requests for etcd should instead be raised as [discussions](https://github.com/etcd-io/etcd/discussions).

Common
types of support requests are:

1. Questions about configuring or operating existing well-documented etcd features, for example, <https://github.com/etcd-io/etcd/issues/15945>. Note - If an existing feature is not well documented please apply the `area/documentation` label and propose documentation improvements that would prevent future users from stumbling on the problem again.

2. Bug reports or questions about unsupported versions of etcd, for example <https://github.com/etcd-io/etcd/issues/15796>. When responding to these issues please refer to our [supported versions documentation](https://etcd.io/docs/latest/op-guide/versioning) and encourage the reporter to upgrade to a recent patch release of a supported version as soon as possible. We should limit the effort supporting users that do not

make the effort to run a supported version of etcd or ensure their version is patched.

3. Bug reports that do not provide a complete list of steps to reproduce the issue and/or contributors are not able to reproduce the issue, for example, <https://github.com/etcd-io/etcd/issues/15740>. We should limit the effort we put into reproducing issues ourselves and motivate users to provide the necessary information to accept the bug report.

4. General questions that are filed using feature request or bug report issue templates, for example, <https://github.com/etcd-io/etcd/issues/15914>. Note - These types of requests may surface good additions to our [frequently asked questions](https://etcd.io/docs/v3.5/faq).

If you identify that an issue is a support request please:

1. Add the `type/support` or `type/question` label.

2. Add the following comment to inform the issue creator that discussions should be used instead and that this issue will be converted to a discussion.

> Thank you for your question, this support issue will be moved to our [Discussion Forums](https://github.com/etcd-io/etcd/discussions).
>
> We are trying to consolidate the channels to which questions for help/support are posted so that we can improve our efficiency in responding to your requests, and make it easier for you to find answers to frequently asked questions and how to address common use cases.
>
> We regularly see messages posted in multiple forums, with the full response thread only in one place or, worse, spread across multiple forums. Also, the large volume of support issues on GitHub is making it difficult for us to use issues to identify real bugs.
>
> Members of the etcd community use Discussion Forums to field support requests. Before posting a new question, please search these for answers to similar questions, and also familiarize yourself with:
>
> 1. [user documentation](https://etcd.io/docs/latest)
> 2. [frequently asked questions](https://etcd.io/docs/v3.5/faq)
>
> Again, thanks for using etcd and raising this question.
>
> The etcd team

3. Finally, click `Convert to discussion` on the right-hand panel, selecting the appropriate discussion category.

Bug reports

If an issue has been raised as a bug it should already have the `type/bug` label, however, if this is missing for an issue you determine to be a bug please add the label manually.

The next step is to validate if the issue is indeed a bug. If not, add a comment with the findings and close the trivial

issue. For non-trivial issues, wait to hear back from the issue reporter and see if there is any objection. If the issue reporter does not reply in 30 days, close the issue.

If the problem can not be reproduced or requires more information, leave a comment for the issue reporter as soon as possible while the issue is fresh for the issue reporter.

Feature requests

New feature requests should be created via the etcd feature request template and in theory already have the `type/feature` label, however, if this is missing for an issue you determine to be a feature please add the label manually.

Test flakes

Test flakes
 are a specific type of bug that the etcd project tracks separately as these are a priority to address. These should be created via the test flake template and in theory already have the `type/flake` label, however, if this is missing for an issue you determine to be related to a flaking test please add the label manually.

Step 4 - Define the areas impacted

Adding an `area` label to an issue helps create visibility on which areas of the etcd project require attention and helps contributors find issues to work on relating to their particular skills or knowledge of the etcd codebase.

If an issue crosses multiple domains please add additional `area` labels to reflect that.

Below is a brief summary of the area labels in active use by the etcd project along with any notes on their use:

Label	Notes
area/external	Tracking label for issues raised that are external to etcd.
area/community	
area/raft	
area/clientv3	
area/performance	
area/security	
area/tls	
area/auth	
area/etcdctl	
area/etcdutl	
area/contrib	Not to be confused with `area/community` this label is specifically
used for issues relating to community-maintained scripts or files in the `contrib/` directory which aren't part of the core etcd project.
area/documentation	
area/tooling	Generally used in relation to the third party / external utilities or tools that are used in various stages of the etcd build, test, or release process, for example, tooling to create sboms.
area/testing	

| area/robustness-testing | |

Step 5 - Prioritise the issue

If an issue lacks a priority label it has not been formally prioritized yet.

Adding a `priority` label helps the etcd project understand what is important and should be worked on now, and conversely, what is not as important and is on the project backlog.

Priority label	What it means	Examples
`priority/critical-urgent`
Maintainers are responsible for making sure that these issues (in their area) are being actively worked oni.e., drop what you're doing. The stuff is burning. These should be fixed before the next release.	user-visible critical bugs in core features broken builds on tier1 supported platforms tests and critical security issues
`priority/important-soon`	Must be staffed and worked on either currently or very soonideally in time for the next release.	
`priority/important-longterm`	Important over the long term, but may not be currently staffed and/or may require multiple releases to complete.	
`priority/backlog`	General agreement that this is a nice-to-have, but no one's available to work on it anytime soon. Community contributions would be most welcome in the meantime, though it might take a while to get them reviewed if reviewers are fully occupied with higher-priority issuesfor example, immediately before a release.	
`priority/awaiting-more-evidence`
Possibly useful, but not yet enough support to actually get it done.	Mostly placeholders for potentially good ideas, so that they don't get completely forgotten, and can be referenced or deduped every time they come up

Step 6 - Support new contributors

As part of the `etcd` triage process once the `kind` and `area` have been determined, please consider if the issue would be suitable for a less experienced contributor. The `good first issue` label is a subset of the `help wanted` label, indicating that members have committed to providing extra assistance for new contributors. All `good first issue` items also have the `help wanted` label.

Help wanted

Items marked with the `help wanted` label need to ensure that they meet these criteria:

* **Low Barrier to Entry** - It should be easy for new contributors.

* **Clear** - The task is agreed upon and does not require further discussions in the community.

* **Goldilocks priority** - The priority
 should not be so high that a core contributor should do it, but not too low that it isnt useful enough for a core contributor to spend time reviewing it, answering questions, helping get it into a release, etc.

Good first issue

Items marked with `good first issue` are intended for first-time contributors. It indicates that members will keep an

eye out for these pull requests and shepherd it through our processes.

New contributors should not be left to find an approver, ping for reviews, decipher test commands, or identify that their build failed due to a flake. It is important to make new contributors feel welcome and valued. We should assure them that they will have an extra level of help with their first contribution.

After a contributor has successfully completed one or two `good first issue` items, they should be ready to move on to `help wanted` items.

* **No Barrier to Entry** - The task is something that a new contributor can tackle without advanced setup or domain knowledge.

*
Solution Explained - The recommended solution is clearly described in the issue.

* **Gives Examples** - Link to examples of similar implementations so new contributors have a reference guide for their changes.

* **Identifies Relevant Code** - The relevant code and tests to be changed should be linked in the issue.

* **Ready to Test** - There should be existing tests that can be modified, or existing test cases fit to be copied. If the area of code doesnt have tests, before labeling the issue, add a test fixture. This prep often makes a great help wanted task!

Step 7 - Follow up

Once initial triage has been completed, issues need to be re-evaluated over time to ensure they don't become stale incorrectly.

Track important issues

If an issue is at risk of being closed by the stale bot in the future, but is an important issue for the etcd project, then please apply the `stage/tracked` label and remove any `stale` labels that exist. This will ensure the project does not lose sight of the issue.

Close incomplete issues

Issues that lack enough information from the issue reporter should be closed if the issue reporter does not provide information in 30 days. Issues can always be re-opened at a later date if new information is provided.

Check for incomplete work

If an issue owned by a developer has no pull request created in 30 days, contact the issue owner and kindly ask about the status of their work, or to release ownership on the issue if needed.
PR management

Purpose

Speed up PR management.

The `etcd` PRs are listed at https://github.com/etcd-io/etcd/pulls
A PR can have various labels, milestones, reviewers, etc. The detailed list of labels can be found at https://github.com/kubernetes/kubernetes/labels

Following are a few example searches on PR for convenience:
* [Open PRS for milestone etcd-v3.6](https://github.com/etcd-io/etcd/pulls?utf8=%E2%9C%93&q=is%3Apr+is%3Aopen+milestone%3Aetcd-v3.6)
* [PRs under investigation](https://github.com/etcd-io/etcd/labels/Investigating)

Scope

These guidelines serve as a primary document for managing PRs in `etcd`. Everyone is welcome to help manage PRs but the work and responsibilities discussed in this document are created with `etcd` maintainers and active contributors in mind.

Ensure tests are run

The etcd project use Kubernetes Prow and GitHub Actions to run tests. To ensure all required tests run if a pull request is ready for testing and still has the `needs-ok-to-test`
label then please comment on the pull request `/ok-to-test`.

Handle inactive PRs
Poke PR owner if review comments are not addressed in 15 days. If the PR owner does not reply in 90 days, update the PR with a new commit if possible. If not, inactive PR should be closed after 180 days.

Poke reviewer if needed

Reviewers are responsive in a timely fashion, but considering everyone is busy, give them some time after requesting a review if a quick response is not provided. If the response is not provided in 10 days, feel free to contact them via adding a comment in the PR or sending an email or message on Slack.

Verify important labels are in place

Make sure that appropriate reviewers are added to the PR. Also, make sure that a milestone is identified. If any of these or other important labels are missing, add them. If a correct label cannot be decided, leave a comment for the maintainers to do so as needed.
Roadmap

etcd uses GitHub milestones to track all tasks in each major or minor release. The `roadmap.md` file only records the
most important tasks for each release. The list is based on the current maintainer capacity that may shift over time. Proposed milestones are what we think we can deliver with the people we have. If we have more support on the important
stuff, we could pick up more items from the backlog. Note that etcd will continue to mainly focus on technical debt over
the next few major or minor releases.

Each item has an assigned priority. Refer to [priority definitions](https://github.com/etcd-io/etcd/blob/main/Documentation/contributor-guide/triage_issues.md#step-5---prioritise-the-issue).

v3.6.0

For a full list of tasks in `v3.6.0`, please see [milestone etcd-v3.6](https://github.com/etcd-io/etcd/milestone/38).

Title	Priority	Status	Note
[Support downgrade](https://github.com/etcd-io/etcd/issues/11716)	priority/important-soon	In progress	etcd will support downgrade starting from 3.6.0. But it will also support offline downgrade from 3.5 to 3.4.
[StoreV2 deprecation](https://github.com/etcd-io/etcd/issues/12913)	priority/important-soon	In progress	This task will be covered in both 3.6 and 3.7.
[Release raft 3.6.0](https://github.com/etcd-io/raft/issues/89)	priority/important-soon	Not started	etcd 3.6.0 will depends on raft 3.6.0
[Release bbolt 1.4.0](https://github.com/etcd-io/bbolt/issues/553)	priority/important-soon	Not started	etcd 3.6.0 will depends on bbolt 1.4.0
[Support /livez and /readyz endpoints](https://github.com/etcd-io/etcd/issues/16007)	priority/important-longterm	In progress	It provides clearer APIs, and can also work around the stalled writes issue
[Bump gRPC](https://github.com/etcd-io/etcd/issues/16290)	priority/important-longterm	Completed	It isn't guaranteed to be resolved in 3.6, and might be postponed to 3.7 depending on the effort and risk.
[Deprecate grpc-gateway or bump it](https://github.com/etcd-io/etcd/issues/14499)	priority/important-longterm	Completed	It isn't guaranteed to be resolved in 3.6, and might be postponed to 3.7 depending on the effort and risk.
[bbolt: Add logger into bbolt](https://github.com/etcd-io/bbolt/issues/509)	priority/important-longterm	Completed	It's important to diagnose bbolt issues
[bbolt: Add surgery commands](https://github.com/etcd-io/bbolt/issues/370)	priority/important-longterm	Completed	Surgery commands are important for fixing corrupted db files
[Evaluate and (Gradulate or deprecate/remove) experimental features](https://github.com/etcd-io/etcd/issues/16292)	priority/backlog	Not started	This task will be covered in both 3.6 and 3.7.

v3.7.0

For a full list of tasks in `v3.7.0`, please see [milestone etcd-v3.7](https://github.com/etcd-io/etcd/milestone/39).

Title	Priority	Note

|
|---|---|---|
| [StoreV2 deprecation](https://github.com/etcd-io/etcd/issues/12913) | P0 | Finish the remaining tasks 3.7. |
| [Refactor lease: Lease might be revoked by mistake by old leader](https://github.com/etcd-io/etcd/issues/15247) | P1 | to be investigated & discussed |
| [Integrate raft's new feature (async write) into etcd](https://github.com/etcd-io/etcd/issues/16291) | P1 | It should improve the performance |
| [bbolt: Support customizing the bbolt rebalance threshold](https://github.com/etcd-io/bbolt/issues/422) | P2 | It may get rid of etcd's defragmentation. Both bbolt and etcd need to be changed. |
| [Evaluate and (graduate or deprecate/remove) experimental features](https://github.com/etcd-io/etcd/issues/16292) | P2 | Finish the remaining tasks 3.7. |

Backlog (future releases)

Title	Priority	Note
[Remove the dependency on grpc-go's experimental API](https://github.com/etcd-io/etcd/issues/15145)		
[Protobuf: cleanup both golang/protobuf and gogo/protobuf](https://github.com/etcd-io/etcd/issues/14533)		
[Proposals should include a merkle root](https://github.com/etcd-io/etcd/issues/13839)		
[Add Distributed Tracing using OpenTelemetry](https://github.com/etcd-io/etcd/issues/12460)		
[Support CA rotation](https://github.com/etcd-io/etcd/issues/11555)		
[bbolt: Migrate all commands to cobra style commands](https://github.com/etcd-io/bbolt/issues/472)		
[raft: enhance the configuration change validation](https://github.com/etcd-io/raft/issues/80)		

Release

The guide talks about how to release a new version of etcd.

The procedure includes some manual steps for sanity checking, but it can probably be further scripted. Please keep this document up-to-date if making changes to the release process.

Release management

The following pool of release candidates manages the release of each etcd major/minor version as well as manages patches
to each stable release branch. They are responsible for communicating the timelines and status of each release and for ensuring the stability of the release branch.

- Benjamin Wang [@ahrtr](https://github.com/ahrtr)
- James Blair [@jmhbnz](https://github.com/jmhbnz)
- Marek Siarkowicz [@serathius](https://github.com/serathius)
- Sahdev Zala [@spzala](https://github.com/spzala)
- Wenjia Zhang [@wenjiaswe](https://github.com/wenjiaswe)

All release version numbers follow the format of [semantic versioning 2.0.0](http://semver.org/).

Major, minor version release, or its pre-release

- Ensure
 the relevant [milestone](https://github.com/etcd-io/etcd/milestones) on GitHub is complete. All referenced issues should be closed or moved elsewhere.
- Ensure the latest [upgrade documentation](https://etcd.io/docs/next/upgrades) is available.
- Bump [hardcoded MinClusterVerion in the repository](https://github.com/etcd-io/etcd/blob/v3.4.15/version/version.go#L29), if necessary.
- Add feature capability maps for the new version, if necessary.

Patch version release

- To request a backport, developers submit cherry-pick PRs targeting the release branch. The commits should not include merge commits. The commits should be restricted to bug fixes and security patches.
- The cherrypick PRs should target the appropriate release branch (`base:release-<major>-<minor>`). The k8s infra cherry pick robot `/cherrypick <branch>` PR chatops command may be used to automatically generate cherrypick PRs.
- The release patch manager reviews the cherrypick PRs. Please discuss carefully what is backported
 to the patch release. Each patch release should be strictly better than its predecessor.
- The release patch manager will cherry-pick these commits starting from the oldest one into stable branch.

Write a release note

- Write an introduction for the new release. For example, what major bug we fix, what new features we introduce, or what performance improvement we make.
- Put `[GH XXXX]` at the head of the change line to reference the Pull Request that introduces the change. Moreover, add a link on it to jump to the Pull Request.
- Find PRs with the `release-note` label and explain them in the `NEWS` file, as a straightforward summary of changes for end-users.

Patch release criteria

The etcd project aims to release a new patch version if any of the following conditions are met:

- Fixed one or more major CVEs (>=7.5).
- Fixed one or more critical bugs.
- Fixed three or more major bugs.
- Fixed five or more minor bugs.

Release guide

Prerequisites

There are some

prerequisites, which should be done before the release process. These are one-time operations, which don't need to be executed before releasing each version.

1. Generate a GPG key and add it to your GitHub account. Refer to the links on [settings](https://github.com/settings/keys).
2. Ensure you have a Linux machine, on which the git, Golang, and docker have been installed.
   - Ensure the Golang version matches the version defined in `.go-version` file.
   - Ensure non-privileged users can run docker commands, refer to the [Linux postinstall](https://docs.docker.com/engine/install/linux-postinstall/).
   - Ensure there is at least 5GB of free space on your Linux machine.
3. Install gsutil, refer to [gsutil_install](https://cloud.google.com/storage/docs/gsutil_install). When asked about cloud project to use, pick `etcd-development`.
4. Authenticate the image registry, refer to [Authentication methods](https://cloud.google.com/container-registry/docs/advanced-authentication).
   - `gcloud auth login`
   - `gcloud auth configure-docker`
5. Install gh, refer to [GitHub's documentation](https://github.com/cli/cli#installation). Ensure that running `gh auth login` succeeds for the GitHub account you use to contribute to etcd, and that `gh auth status` has a clean exit and doesn't show any issues.

Release steps

1. Raise an issue to publish the release plan, e.g. [issues/17350](https://github.com/etcd-io/etcd/issues/17350).
2. Raise a `kubernetes/org` pull request to temporarily elevate permissions for the GitHub release team.
3. Once permissions are elevated, temporarily relax [branch protections](https://github.com/etcd-io/etcd/settings/branches) to allow pushing changes directly to `release-*` branches in GitHub.
4. Verify you can pass the authentication to the image registries,
   - `docker login gcr.io`
   - `docker login quay.io`
     - If the release person doesn't have access to 1password, one of the owners (@ahrtr, @ivanvc, @jmhbnz, @serathius) needs to share the password with them per [this guide](https://support.1password.com/share-items/). See rough steps below,
       - [Sign in](https://team-etcd.1password.com/home) to your account on 1password.com.
       - Click `Your Vault Items` on the right side.
       - Select `Password of quay.io`.
       - Click `Share` on the top right, and set expiration as `1 hour` and only available to the release person using his/her email.
       - Click `Copy Link` then send the link to the release person via slack or email.
5. Clone the etcd repository and checkout the target branch,
   - `git clone --branch release-3.X git@github.com:etcd-io/etcd.git`
6. Run the release script under the repository's root directory, replacing `${VERSION}` with a value without the `v` prefix, i.e. `3.5.13`.
   - `DRY_RUN=false ./scripts/release.sh ${VERSION}`
   - **NOTE:** When doing a pre-release (i.e., a version from the main branch, 3.6.0-alpha.2), you will need to explicitly set the branch to main:

```
DRY_RUN=false BRANCH=main ./scripts/release.sh ${VERSION}
```

It generates all release binaries under the directory `/tmp/etcd-release-${VERSION}/etcd/release/` and images. Binaries are pushed to the Google Cloud bucket
under project `etcd-development`, and images are pushed to `quay.io` and `gcr.io`.

7. Publish the release page on GitHub
- Open the **draft** release URL shown by the release script
- Click the pen button at the top right to edit the release
- Review that it looks correct, reviewing that the bottom checkboxes are checked depending on the release version (v3.4 no checkboxes, v3.5 has the set as latest release checkbox checked, v3.6 has the set as pre-release checkbox checked)
- Then, publish the release

8. Announce to the etcd-dev googlegroup

Follow the format of previous release emails sent to etcd-dev@googlegroups.com, see an example below. After sending out the email, ask one of the mailing list maintainers to approve the
email from the pending list. Additionally, label the release email as `Release`.

```text
Hello,

etcd v3.4.30 is now public!

https://github.com/etcd-io/etcd/releases/tag/v3.4.30

Thanks to everyone who contributed to the release!

etcd team
```

9. Update the changelog to reflect the correct release date.
10. Paste the release link to the issue raised in Step 1 and close the issue.
11. Restore standard branch protection settings and raise a follow-up `kubernetes/org` pull request to return to least privilege permissions.
12. Crease a new stable branch through `git push origin release-${VERSION_MAJOR}.${VERSION_MINOR}` if this is a new major or minor stable release.
13. Re-generate a new password for quay.io if needed (e.g. shared to a contributor who isn't in the release team, and we should rotate the password at least once every 3 months).

Release known issues

1. Timeouts pushing binaries - If binaries fail to fully upload to Google Cloud storage, the script must be re-run using the same command. Any artifacts that are already pushed will be overwritten to ensure they are correct. The storage bucket does not use object versioning so incorrect files cannot remain.

2. Timeouts pushing images - It is rare, although possible for connection timeouts to occur when publishing etcd

release images to `quay.io` or `gcr.io`. If this occurs, it is known to be safe to rerun the release script command appending the `--no-upload` flag, and image uploads will gracefully resume.

3. GPG vs SSH signing - The release scripts assume that git tags will be signed with a GPG key. Since 2022 GitHub has supported [signing commits and tags using ssh](https://github.blog/changelog/2022-08-23-ssh-commit-verification-now-supported). Until further release script updates are completed you will need to disable this feature in your `~/.gitconfig` and revert to signing via GPG to perform etcd releases.
Golang modules

The etcd project (since version 3.5) is organized into multiple
[golang modules](https://golang.org/ref/mod) hosted in a [single repository](https://golang.org/ref/mod#vcs-dir).

There are the following modules:

- **go.etcd.io/etcd/api/v3** - contains API definitions
(like protos & proto-generated libraries) that defines communication protocol
between etcd clients and servers.

- **go.etcd.io/etcd/pkg/v3** - a collection of utility packages used by etcd
without being specific to etcd itself. A package belongs here
only if it could possibly be moved out into its own repository in the future.
Please avoid adding here code that has a lot of dependencies on its own, as
they automatically become dependencies of the client library
(that we want to keep lightweight).

- **go.etcd.io/etcd/client/v3** - client library used to contact etcd over
the network (grpc). Recommended for all new usage of etcd.

- **go.etcd.io/raft/v3**
- implementation of distributed consensus
protocol. Should have no etcd specific code. Hosted in a separate repository:
https://github.com/etcd-io/raft.

- **go.etcd.io/etcd/server/v3** - etcd implementation.
The code in this package is internal to etcd and should not be consumed
by external projects. The package layout and API can change within the minor versions.

- **go.etcd.io/etcd/etcdctl/v3** - a command line tool to access and manage etcd.

- **go.etcd.io/etcd/tests/v3** - a module that contains all integration tests of etcd.
  Notice: All unit tests (fast and not requiring cross-module dependencies)
  should be kept in the local modules of the code under the test.

- **go.etcd.io/bbolt** - implementation of persistent b-tree.
  Hosted in a separate repository: https://github.com/etcd-io/bbolt.

Operations

1. All etcd modules should be released in the same versions, e.g.
 `go.etcd.io/etcd/client/v3@v3.5.10` must depend on `go.etcd.io/etcd/api/v3@v3.5.10`.

  The consistent updating of versions can be performed using:
 ```shell script
 % DRY_RUN=false TARGET_VERSION="v3.5.10" ./scripts/release_mod.sh update_versions
 ```
2. The released modules should be tagged according to https://golang.org/ref/mod#vcs-version rules,
 i.e. each module should get its own tag.
 The tagging can be performed using:
 ```shell script
 % DRY_RUN=false REMOTE_REPO="origin" ./scripts/release_mod.sh push_mod_tags
 ```

3. All etcd modules should depend on the same versions of underlying dependencies.
 This can be verified using:
 ```shell script
 % PASSES="dep" ./test.sh
 ```

4. The go.mod files must not contain dependencies not being used and must
 conform to `go mod tidy` format.
 This is being verified by:
 ```
 % PASSES="mod_tidy" ./test.sh
 ```

5. To trigger actions across all modules (e.g. auto-format all files), please
 use/expand the following script:
 ```shell script
 % ./scripts/fix.sh
 ```

###
 Future

As a North Star, we would like to evaluate etcd modules towards the following model:

![modules graph](modules-future.svg)

This assumes:
 - Splitting etcdmigrate/etcdadm out of etcdctl binary.
  Thanks to this etcdctl would become clearly a command-line wrapper
  around network client API,
  while etcdmigrate/etcdadm would support direct physical operations on the

etcd storage files.
- Splitting etcd-proxy out of ./etcd binary, as it contains more experimental code
so carries additional risk & dependencies.
- Deprecation of support for v2 protocol.
Reporting bugs

If any part of the etcd project has bugs or documentation mistakes, please let us know by [opening an issue][etcd-issue]. We treat bugs and mistakes very seriously and believe no issue is too small. Before creating a bug report, please check that an issue reporting the same problem does not already exist.

To make the bug report accurate and easy to understand, please try to create bug reports that are:

- Specific. Include as many details as possible: which version, what environment, what configuration, etc. If the bug is related to running the etcd server, please attach the etcd log (the starting log with the etcd configuration is especially important).

- Reproducible. Include the steps to reproduce the problem. We understand some issues might be hard to reproduce, please include the steps that might lead to the problem. If possible, please attach the affected etcd data dir and stack trace to the bug report.

- Isolated. Please try to isolate and reproduce the bug with
minimum dependencies. It would significantly slow down the speed to fix a bug if too many dependencies are involved in a bug report. Debugging external systems that rely on etcd is out of scope, but we are happy to provide guidance in the right direction or help with using etcd itself.

- Unique. Do not duplicate existing bug reports.

- Scoped. One bug per report. Do not follow up with another bug inside one report.

It may be worthwhile to read [Elika Etemads article on filing good bug reports][filing-good-bugs] before creating a bug report.

We might ask for further information to locate a bug. A duplicated bug report will be closed.

Frequently asked questions

How to get a stack trace

``` bash
$ kill -QUIT $PID
```

How to get the etcd version

``` bash
$ etcd --version
```

How to get etcd configuration and log when it runs as systemd service etcd2.service

``` bash
$ sudo systemctl cat etcd2
$ sudo journalctl -u etcd2
```

Due to an upstream systemd bug, journald
may miss the last few log lines when its processes exit. If journalctl says etcd stopped without a fatal or panic message, try `sudo journalctl -f -t etcd2` to get the full log.

[etcd-issue]: https://github.com/etcd-io/etcd/issues/new
[filing-good-bugs]: http://fantasai.inkedblade.net/style/talks/filing-good-bugs/
Community membership

This doc outlines the various responsibilities of contributor roles in etcd.

Role	Responsibilities	Requirements	Defined by
Member	Active contributor in the community	Sponsored by 2 reviewers and multiple contributions	etcd GitHub org member
Reviewer	Review contributions from other members	History of review and authorship	[OWNERS] file reviewer entry
Maintainer	Set direction and priorities for the project	Demonstrated responsibility and excellent technical judgement	[OWNERS] file approver entry

New contributors

New contributors should be welcomed to the community by existing members,
helped with
PR workflow, and directed to relevant documentation and
communication channels.

Established community members

Established community members are expected to demonstrate their adherence to the
principles in this document, familiarity with project organization, roles,
policies, procedures, conventions, etc., and technical and/or writing ability.
Role-specific expectations, responsibilities, and requirements are enumerated
below.

Member

Members are continuously active contributors to the community. They can have
issues and PRs assigned to them. Members are expected to remain active
contributors to the community.

Defined by: Member of the etcd GitHub organization.

Requirements

- Enabled [two-factor authentication] on their GitHub account
- Have made multiple contributions to the project or community. Contribution may include, but is not limited to:
  - Authoring or reviewing PRs on GitHub. At least one PR must be **merged**.
  - Filing or commenting on issues on
GitHub
  - Contributing to community discussions (e.g. meetings, Slack, email discussion
    forums, Stack Overflow)
- Subscribed to [etcd-dev@googlegroups.com](https://groups.google.com/g/etcd-dev)
- Have read the [contributor guide]
- Sponsored by two active maintainers or reviewers.
  - Sponsors must be from multiple member companies to demonstrate integration across the community.
  - With no objections from other maintainers
- Open a [membership nomination] issue against the `kubernetes/org` repo
  - Ensure your sponsors are @mentioned on the issue
  - Make sure that the list of contributions included is representative of your work on the project.
- Members can be removed by a supermajority of the maintainers or can resign by notifying
the maintainers.

Responsibilities and privileges

- Responsive to issues and PRs assigned to them
- Granted "triage access" to etcd project
- Active owner of code they have contributed (unless ownership is explicitly transferred)
  - Code is well-tested
  - Tests consistently pass
  - Addresses bugs or issues discovered after code is accepted

Note: Members who frequently contribute code are expected to proactively
perform code reviews and work towards becoming a *reviewer*.

Reviewers

Reviewers are contributors who have demonstrated greater skill in
reviewing the code from other contributors. They are knowledgeable about both
the codebase and software engineering principles. Their LGTM counts towards
merging a code change into the project. A reviewer is generally on the ladder towards
maintainership.

Defined by: *reviewers* entry in the [OWNERS] file.

Requirements

- member for at least 3 months.

- Primary reviewer for at least 5 PRs to the codebase.
- Reviewed or contributed at least 20 substantial PRs to the codebase.
- Knowledgeable about the codebase.
- Sponsored by two active maintainers.
  - Sponsors must be from multiple member companies to demonstrate integration across the community.
  - With no objections from other maintainers
- Reviewers can be removed by a supermajority of the maintainers or can resign by notifying the maintainers.

Responsibilities and privileges

- Code reviewer status may be a precondition to accepting large code contributions
- Responsible for project quality control via code reviews
  - Focus on code quality and correctness, including testing and factoring
  - May also review for more holistic issues, but not a requirement
- Expected to be responsive to review requests
- Assigned PRs to review related to area of expertise
- Assigned test bugs related to area of expertise
- Granted "triage access" to etcd project

Maintainers

Maintainers are first and foremost contributors who have shown they
are committed to the long-term success of a project. Maintainership is about building
trust with the current maintainers and being a person that they can
depend on to make decisions in the best interest of the project in a consistent manner.

Defined by: *approvers* entry in the [OWNERS] file.

Requirements

- Deep understanding of the technical goals and direction of the project
- Deep understanding of the technical domain of the project
- Sustained contributions to design and direction by doing all of:
  - Authoring and reviewing proposals
  - Initiating, contributing, and resolving discussions (emails, GitHub issues, meetings)
  - Identifying subtle or complex issues in the designs and implementation of PRs
- Directly contributed to the project through implementation and/or review
- Sponsored by two active maintainers and elected by supermajority
  - Sponsors must be from multiple member companies to demonstrate integration across the community.
- To become a maintainer send an email with your candidacy to etcd-maintainers-private@googlegroups.com
  - Ensure your sponsors are @mentioned in the email
  - Include a list of contributions representative of your work on the project.
  -

Existing maintainers vote will privately and respond to the email with either acceptance or feedback for suggested improvement.

- With your membership approved you are expected to:
 - Open a PR and add an entry to the [OWNERS] file
 - Subscribe to etcd-maintainers@googlegroups.com and etcd-maintainers-private@googlegroups.com
 - Request to join [etcd-maintainer teams of etcd organization of GitHub](https://github.com/orgs/etcd-io/teams/maintainers-etcd)
 - Request to join the private slack channel for etcd maintainers on [kubernetes slack](http://slack.kubernetes.io/)
 - Request access to etcd-development GCP project where we publish releases
 - Request access to passwords shared between maintainers

Responsibilities and privileges

- Make and approve technical design decisions
- Set technical direction and priorities
- Define milestones and releases
- Mentor and guide reviewers, and contributors to the project.
- Participate when called upon in the [security disclosure and
 release process]
- Ensure the continued health of the project
  - Adequate test coverage to confidently release
  - Tests are passing reliably (i.e. not flaky) and are fixed when they fail
- Ensure a healthy process for discussion and decision-making is in place.
- Work with other maintainers to maintain the project's overall health and success holistically

Retiring

Life priorities, interests, and passions can change. Maintainers can retire and
move to [emeritus maintainers]. If a maintainer needs to step down, they should
inform other maintainers and, if possible, help find someone to pick up the related
work. At the very least, ensure the related work can be continued. Afterward,
they can remove themselves from the list of existing maintainers.

If a maintainer has not been performing their duties for 12 months,
they can be removed by other maintainers. In that case, the inactive maintainer will
be first notified via an email. If the situation doesn't improve, they will be
removed.
 If an emeritus maintainer wants to regain an active role, they can do
so by renewing their contributions. Active maintainers should welcome such a move.
Retiring other maintainers or regaining the status should require the approval
of at least two active maintainers.

Acknowledgements

Contributor roles and responsibilities were written based on [Kubernetes community membership]

[OWNERS]: /OWNERS
[contributor guide]: /CONTRIBUTING.md
[membership nomination]: https://github.com/kubernetes/org/issues/new?assignees=&labels=area%2Fgithub-membership&projects=&template=membership.yml&title=REQUEST%3A+New+membership+for+%3Cyour-GH-

handle%3E
[Kubernetes community membership]: https://github.com/kubernetes/community/blob/master/community-membership.md
[emeritus maintainers]: /README.md#etcd-emeritus-maintainers
[security disclosure and release process]: /security/README.md
[two-factor authentication]: https://docs.github.com/en/authentication/securing-your-account-with-two-factor-authentication-2fa/about-two-factor-authentication

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Logging Conventions

etcd uses the [zap][zap] library for logging application output categorized into *levels*. A log message's level is determined according to these conventions:

* Debug: Everything is still fine, but even common operations may be logged, and less helpful but more quantity of notices. Usually not used in production.
 * Examples:
  * Send a normal message to a remote peer
  * Write a log entry to disk

* Info: Normal, working log information, everything is fine, but helpful notices for auditing or common operations. Should rather not be logged more frequently than once per a few seconds in a normal server's operation.
 * Examples:
  * Startup configuration
  * Start to do a snapshot

* Warning: (Hopefully) Temporary conditions that may cause errors, but may work fine. A replica disappearing (that may reconnect) is a warning.
 * Examples:
  * Failure to send a raft message to a remote peer
  * Failure to receive heartbeat message within the configured election

timeout

* Error: Data has been lost, a request has failed for a bad reason, or a required resource has been lost.
 * Examples:
   * Failure to allocate disk space for WAL

* Panic: Unrecoverable or unexpected error situation that requires stopping execution.
 * Examples:
   * Failure to create the database

* Fatal: Unrecoverable or unexpected error situation that requires immediate exit. Mostly used in the test.
 * Examples:
   * Failure to find the data directory
   * Failure to run a test function

[zap]: https://github.com/uber-go/zap
Dependency management

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- **[Core dependencies mappings](#core-dependencies-mappings)**

Main branch

The dependabot is enabled & [configured](https://github.com/etcd-io/etcd/blob/main/.github/dependabot.yml) to manage dependencies for etcd `main` branch. But dependabot doesn't work well for multi-module repository like `etcd`,
see [dependabot-core/issues/6678](https://github.com/dependabot/dependabot-core/issues/6678).
Usually, human intervention is required
 each time when dependabot automatically opens some PRs to bump dependencies.
Please see the guidance below.

Dependencies used in workflows

The PRs that automatically bump dependencies (see examples below) used in workflows are fine and can be approved & merged directly as long as all checks are successful.

- [build(deps): bump github/codeql-action from 2.2.11 to 2.2.12](https://github.com/etcd-io/etcd/pull/15736)

- [build(deps): bump actions/checkout from 3.5.0 to 3.5.2](https://github.com/etcd-io/etcd/pull/15735)
- [build(deps): bump ossf/scorecard-action from 2.1.2 to 2.1.3](https://github.com/etcd-io/etcd/pull/15607)

Bumping order

When multiple etcd modules depend on the same package, please bump the package version for all the modules in the correct order. The rule is simple:
if module A depends on module B, then bump the dependency for module B before module A. If the two modules do not depend on each other, then
it doesn't matter to bump which module first. For
example, multiple modules depend on `github.com/spf13/cobra`, so we need to bump the dependency
in the following order,

- go.etcd.io/etcd/pkg/v3
- go.etcd.io/etcd/server/v3
- go.etcd.io/etcd/etcdctl/v3
- go.etcd.io/etcd/etcdutl/v3
- go.etcd.io/etcd/tests/v3
- go.etcd.io/etcd/v3
- go.etcd.io/etcd/tools/v3

For more details about etcd Golang modules, please check <https://etcd.io/docs/next/dev-internal/modules>

Note the module `go.etcd.io/etcd/tools/v3` doesn't depend on any other modules, nor by any other modules, so it doesn't matter when to bump dependencies for it.

Steps to bump a dependency

Use the `github.com/spf13/cobra` as an example, follow the steps below to bump it from 1.6.1 to 1.7.0 for module `go.etcd.io/etcd/etcdctl/v3`,

```bash
cd ${ETCD_ROOT_DIR}/etcdctl
go get github.com/spf13/cobra@v1.7.0
go mod tidy
cd ..
./scripts/fix.sh
```

Execute the same steps for all other modules. When you finish bumping the dependency for all modules, then commit the change,

```bash
git
 add .
git commit --signoff -m "dependency: bump github.com/spf13/cobra from 1.6.1 to 1.7.0"
```

Please close the related PRs which were automatically opened by dependabot.

When you bump multiple dependencies in one PR, it's recommended to create a separate commit for each dependency. But it isn't a must; for example,
you can get all dependencies bumping for the module `go.etcd.io/etcd/tools/v3` included in one commit.

Troubleshooting

In an event of bumping the version of protoc, protoc plugins or grpc-gateway, it might change `*.proto` file which can result in the following error:

```bash
[0;31mFAIL: 'genproto' FAILED at Wed Jul 31 07:09:08 UTC 2024
make: *** [Makefile:134: verify-genproto] Error 255
```

To fix the above error, run the following script from the root of etcd repository:

```bash
./scripts/genproto.sh
```

Indirect dependencies

Usually, we don't bump a dependency if all modules just indirectly depend on it, such as `github.com/go-logr/logr`.

If
 an indirect dependency (e.g. `D1`) causes any CVE or bugs that affect etcd, usually the module (e.g. `M1`, not part of etcd, but used by etcd)
which depends on it should bump the dependency (`D1`), and then etcd just needs to bump `M1`. However, if the module (`M1`) somehow doesn't
bump the problematic dependency, then etcd can still bump it (`D1`) directly following the same steps above. But as a long-term solution, etcd should
try to remove the dependency on such module (`M1`) that lack maintenance.

For mixed cases, in which some modules directly while others indirectly depend on a dependency, we have multiple options,

- Bump the dependency for all modules, no matter it's direct or indirect dependency.
- Bump the dependency only for modules that directly depend on it.

We should try to follow the first way, and temporarily fall back to the second one if we run into any issue on the first way. Eventually we
should fix the issue and ensure all modules depend on the same version of the
 dependency.

Known incompatible dependency updates

arduino/setup-protoc

Please refer to [build(deps): bump arduino/setup-protoc from 1.3.0 to 2.0.0](https://github.com/etcd-io/etcd/pull/16016)

Rotation worksheet

The dependabot scheduling interval is weekly; it means dependabot will automatically raise a bunch of PRs per week.
Usually, human intervention is required each time. We have a [rotation worksheet](https://docs.google.com/spreadsheets/d/1jodHIO7Dk2VWTs1IRnfMFaRktS9IH8XRyifOnPdSY8I/edit#gid=1394774387),
and everyone is welcome to participate; you just need to register your name in the worksheet.

Stable branches

Usually, we don't proactively bump dependencies for stable releases unless there are any CVEs or bugs that affect etcd.

If we have to do it, then follow the same guidance above. Note that there is no `./scripts/fix.sh` in release-3.4, so no need to
execute it for 3.4.

Golang versions

The etcd project aims to maintain a development branch that
is on the latest [Go version](https://go.dev/dl), ideally, this will align with the Go version in use for Kubernetes project development. For an example of how to update etcd to a new minor release of Go refer to issue <https://github.com/etcd-io/etcd/issues/16393> and the linked pull requests.

Suggested steps for performing a minor version upgrade for the etcd development branch:

1. Carefully review new Go version release notes and potentially related blog posts for any deprecations, performance impacts, or other considerations.
2. Create a GitHub issue to signal intent to upgrade and invite discussion, for example, <https://github.com/etcd-io/etcd/issues/16393>.
3. Complete the upgrade locally in your development environment by editing `.go-version` and running `make fix`.
4. Run performance benchmarks locally to compare before and after.
5. Raise a pull request for the changes, for example, <https://github.com/etcd-io/etcd/pull/16394>.

Stable etcd release branches will be maintained
to stay on the latest patch release of a supported Go version. Upgrading minor versions will be completed before the minor version in use currently is no longer supported. Refer to the [Go release policy](https://go.dev/doc/devel/release).

For an example of how to update etcd to a new patch release of Go refer to issue <https://github.com/etcd-io/etcd/issues/16343> and the linked pull requests.

References:

- <https://github.com/kubernetes/sig-release/blob/master/release-engineering/handbooks/go.md>

Core dependencies mappings

[bbolt](https://github.com/etcd-io/bbolt) and [raft](https://github.com/etcd-io/raft) are two core dependencies of etcd.

Both etcd 3.4.x and 3.5.x depend on bbolt 1.3.x, and etcd 3.6.x (`main` branch) depends on bbolt 1.4.x.

raft is included in the etcd repository for release-3.4 and release-3.5 branches, so etcd 3.4.x and 3.5.x do not depend on any
external raft module. We moved raft into [a separate repository](https://github.com/etcd-io/raft) starting from 3.6 (`main` branch), and the first raft
release will be v3.6.0, so etcd 3.6.x will depend on raft 3.6.x.

Please see the table below:

etcd versions	bbolt versions	raft versions
3.4.x	v1.3.x	N/A
3.5.x	v1.3.x	N/A
3.6.x	v1.4.x	v3.6.x

1.158 errors 0.9.1

1.158.1 Available under license :

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